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ABSTRACT

During the 1981-82 testing year, foreign nationals representing over 140 countries or territories made up approximately 17 percent of all Graduate Record Examinations (GRE) General Test takers. Most of these examinees were non-native speakers of English for whom average scores on the verbal and analytical measures were considerably lower than those of native English speakers. However, the quantitative mean profile of foreign examinees did not vary according to English language background and was quite similar to that of U.S. examinees. Detailed comparative profiles of GRE performance data are provided for the general foreign and U.S. examinee populations; for foreign examinees classified by country of citizenship; and for groups of foreign and U.S. examinees defined in terms of age, sex, reported English language communication status, intended graduate field, U.S. vs. other undergraduate origin, repeater vs. nonrepeater status, and other personal, academic, and testing-related characteristics. Study findings suggest that GRE General Test data (especially verbal and analytical test data) generated by non-U.S. citizens from non-native English speaking societies should not be treated as comparable to test data for U.S. examinees or examinees from other native-English speaking societies. (Author/BW)

GRE

GRADUATE RECORD EXAMINATIONS

FOREIGN NATIONALS TAKING THE GRE GENERAL TEST DURING 1981-82:

HIGHLIGHTS OF A STUDY

Kenneth M. Wilson

GRE Board Research Report GREB No. 81-23aR
ETS Research Report 84-23

September 1984

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EDUCATIONAL TESTING SERVICE, PRINCETON, NJ

Foreign Nationals Taking the GRE General Test During 1981-82: Highlights of a Study

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Abstract

During the 1981-82 testing year, foreign nationals representing over 140 countries or territories made up approximately 17 percent of all GRE General Test takers. However, they were heavily concentrated in scientific-technical fields--for example, almost one-half of all examinees in engineering and one-third of those in math-science fields were foreign nationals. Most of these examinees were non-native speakers of English for whom average scores on the verbal and analytical measures were considerably lower than those of native English speakers (both U.S. and foreign) in similar fields of study. However, the quantitative mean profile, by field, of foreign examinees did not vary according to English language background and was quite similar to that of U.S. examinees.

Detailed comparative profiles of GRE performance data are provided for the general foreign and U.S. examinee populations, and for foreign examinees classified by country of citizenship. In addition, the study analyzes GRE performance of groups of foreign and U.S. examinees defined in terms of age, sex, reported English language communication status, intended graduate field, U.S. vs other undergraduate origin, repeater vs nonrepeater status, and other personal, academic, and testing-related characteristics.

Study findings suggest that GRE General Test data (especially verbal and analytical test data) generated by non-U.S. citizens from non-native English speaking societies should not be treated as comparable to test data for U.S. examinees or examinees from other native-English speaking societies.

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Foreign Nationals Taking the GRE General Test During 1981-82: Highlights of a Study

Kenneth M. Wilson
Educational Testing Service

Introduction

The Graduate Record Examinations (GRE) General (Aptitude) Test, widely used in evaluating the academic qualifications of applicants for admission to graduate schools, is oriented to citizens of the United States, the majority of whom share a common acculturation in the sense of having been born, reared, and formally schooled in the United States with English as the language of discourse. However, large numbers of foreign nationals also take the GRE General Test each year in support of their admission applications. Differences in linguistic, cultural, and educational background between U.S. and foreign examinees, and between examinees from different countries, complicate the interpretation of scores presented by foreign applicants, especially those for whom English is not the native language.

This report highlights and summarizes major findings of a detailed study, sponsored by the Graduate Record Examinations Board, designed to provide information regarding (a) selected demographic, academic, and testing-related characteristics of foreign examinees tested during 1981-82 and (b) their performance on the GRE General Test in relation to those characteristics.*

The study employed data from GRE files for (a) 26,455 GRE General Test takers during 1981-82 who identified themselves as non-U.S. citizens and named a country of citizenship in response to GRE background questions and (b) a 10 percent sample (N = 15,638) of U.S. citizens.** Responses to the GRE background information questions on citizenship and other items and to certain items on the GRE registration form provided data on the following variables (see Appendix A for detail):

Personal background variables

- Country of citizenship
- Resident alien (permanent) vs other non-U.S. status
- English communication status (EPL or English primary language vs ESL or English secondary language)

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* Wilson, Kenneth M. (1984). Foreign nationals taking the GRE General Test during 1981-82: Selected characteristics and test performance (GRE Board Professional Report No. 81-23bP). Princeton, NJ: Educational Testing Service.

**Overall, 31,791 test-takers identified themselves as non-U.S. citizens, or 16.9 percent of all respondents to the U.S. citizenship question. The records of 5,336 self-reported non-U.S. citizens were not included in the study because these individuals did not name country of citizenship.

- Native (or best) language
- Sex
- Age, calculated from date of birth
- Father's educational level
- Mother's educational level

Academic variables

- Degree goal (doctorate vs master's)
- Undergraduate major*
- Graduate major*
- U.S. vs other undergraduate school
- Current educational status

Testing-related variables

- Tested in U.S. center vs other center
- Previous experience with GRE tests vs other status (repeater vs nonrepeater status)
- Designated institutions/departments to receive score reports vs did not do so (reporting vs nonreporting behavior); for reporting examinees, number of institutions/departments designated
- GRE Subject (Advanced) Test (did or did not take a Subject Test).

Scores on the verbal, quantitative, and analytical sections of the GRE General Test were available for each examinee.

Summary data on the basic personal, academic, and testing-related variables enumerated above were compiled (a) for all foreign examinees without regard to country of citizenship, (b) for the 10 percent sample of U.S. examinees, and (c) for foreign nationals classified by country (25 countries represented by 200 or more examinees) and world region (all countries).

GRE score means and standard deviations were computed for U.S. examinees and for foreign examinees generally and, within the respective general populations, GRE score data were compiled for subgroups defined in terms of age, sex, English primary or secondary language status (EPL vs ESL), graduate major area, and status on other personal, academic, and testing-related variables. Parallel GRE performance profiles were developed for examinees by country of citizenship for each of 25 countries represented by 200 or more examinees. These countries will be referred to hereafter as the "leading" countries of origin of examinees during 1981-82, and examinees from the respective countries will be referred to as members of the "leading" contingents.

Selected tabular summaries of data from the study are appended for reference (Appendix B). Detailed discussion of the content of these tables

*See Appendix A for the classification of fields employed in the study.

and other data, and of specific factors that need to be considered in their evaluation, may be found in the basic study report. However, the following general considerations that dictate the exercise of interpretive caution and inferential restraint in evaluating the data may be noted here.

- o The data are descriptive only of U.S. examinees and foreign nationals who happen to have become members of the GRE examinee pool during 1981-82 as the result of complex processes of academic, socioeconomic, and perhaps political selection, and self-selection, that undoubtedly vary from country to country.

- o Examinees from various foreign countries are not necessarily representative of the populations of prospective or enrolled graduate-level students in their respective countries.

- o Given the diversity in the organization of educational systems throughout the world, some background questions (for example, regarding educational status or attainment framed in terms of the U.S. system) are unlikely to have precisely the same meaning for all foreign nationals.

- o The GRE population generally is highly differentiated along disciplinary lines. There are differences by discipline in performance on the GRE, sex-mix, educational status of examinees at time of testing, and other variables. Many of the analyses of test performance in this study were not controlled for discipline, sex, or other variables.

Major Findings

This summary report highlights (a) the diverse national origins of foreign examinees and corresponding differences in linguistic, cultural, and educational background, (b) the concentration of foreign examinees in scientific and technical fields, (c) the variation in average examinee performance on the GRE verbal measure across countries as a function of differences in English-language background variables,* and (d) findings regarding GRE General Test performance in relation to the personal, academic, and testing-related variables studied (that is, sex, age, educational status, parental education, location of test center, and so on). Implications are discussed in the final section.

National Origin

The diverse national origins of the GRE foreign examinee population are clearly evident in Exhibits A and B.** A total of 142 countries or territories were named by two or more examinees as the country of citizenship. However,

*Emphasis throughout is on the verbal measure. However, trends cited for the verbal measure tended to hold for the analytical measure as well.

** In this report, both independent countries and dependent territories are referred to for convenience as "countries of citizenship."

Exhibit A

Countries or Territories of Citizenship in Descending Order of Number of GRE Examinees Tested During 1981-82

COUNTRY OF CITIZENSHIP AND REGION	N	COUNTRY OF CITIZENSHIP AND REGION	N	COUNTRY OF CITIZENSHIP AND REGION	N
U. S. A.	(15638)	NETHERLANDS	(85)	SWAZILAND	(22)
INDIA	(4210)	TRINIDAD & TOBAGO	(85)	NETH. ANTILLES	(21)
TAIWAN	(3791)	BELGIUM	(75)	GERMAN DEM. REP.	(20)
KOREA	(1547)	CUBA	(70)	MALI	(20)
CANADA	(1470)	ETHIOPIA	(70)	TUNISIA	(19)
IRAN	(1119)	KUWAIT	(66)	FIJI ISLS.	(17)
JAPAN	(894)	SWEDEN	(63)	SOMALIA	(14)
NIGERIA	(883)	CYPRUS	(61)	U. ARAB EMIRATES	(14)
THAILAND	(778)	NEW ZEALAND	(55)	BARBADOS	(13)
HONG KONG	(674)	SWITZERLAND	(55)	AZORES	(12)
MEXICO	(631)	SYRIA	(53)	CZECHOSLAVAKIA	(12)
MALAYSIA	(628)	GUYANA	(53)	PUERTO RICO	(12)
GREAT BRITAIN	(599)	PANAMA	(51)	BERMUDA	(11)
PHILIPPINES	(467)	ICELAND	(51)	BELIZE	(10)
GREECE	(424)	MACAO	(50)	ROMANIA	(10)
VENEZUELA	(396)	LIBERIA	(50)	MONGOLIA	(9)
LEBANON	(332)	PORTUGAL	(49)	BHUTAN	(9)
FRANCE	(297)	LIBYA	(48)	MAURITIUS	(8)
BRAZIL	(294)	NORWAY	(47)	QATAR	(8)
INDONESIANA	(275)	COSTA RICA	(46)	LAOS	(8)
FED. REP. GERMANY	(267)	ECUADOR	(45)	AMERICAN SAMOA	(8)
PAKISTAN	(266)	CAMEROON	(45)	U. S. S. R.	(8)
TURKEY	(248)	POLAND	(43)	PARAGUAY	(8)
COLUMBIA	(236)	GUATEMALA	(42)	BURMA	(7)
SAUDI ARABIA	(222)	YUGOSLAVIA	(41)	BOTSWANA	(7)
AUSTRALIA	(210)	ZIMBABWE	(41)	SENEGAL	(6)
JORDAN	(192)	TANZANIA	(41)	HUNGARY	(6)
ISRAEL	(187)	UGANDA	(39)	TONGA	(5)
EGYPT	(176)	SIERRA LEONE	(39)	TOGO	(5)
SRI LANKA	(167)	NEPAL	(37)	AFGHANISTAN	(5)
BANGLADESH	(156)	NICARAGUA	(37)	KAMPUCHEA	(5)
JAMAICA	(155)	DOMINICA	(36)	OMAN	(3)
VIETNAM	(154)	FINLAND	(35)	YEMEN	(3)
SINGAPORE	(150)	SUDAN	(34)	UPPER VOLTA	(3)
P. R. OF CHINA	(146)	IVORY COAST	(33)	CAROLINE ISLS.	(3)
GHANA	(143)	MOROCCO	(32)	MARIANA ISLS.	(3)
PERU	(130)	HONDURAS	(31)	NEW CALEDONIA	(3)
CHILE	(128)	HAITI	(30)	MALTA	(3)
ARGENTINA	(127)	BAHAMAS	(29)	ANGOLA	(3)
SPAIN	(127)	ZAMBIA	(29)	MOZAMBIQUE	(3)
ITALY	(124)	EL SALVADOR	(28)	CONGO	(3)
KENYA	(118)	DENMARK	(27)	C. AFRICAN REP.	(3)
SOUTH AFRICA	(112)	AUSTRIA	(27)	CHAD	(2)
ALGERIA	(101)	BAHRAIN	(25)	BENIN	(2)
IRELAND	(100)	WEST INDIES A. S.	(25)	GUINEA	(2)
IRAQ	(92)	MALAWI	(25)	LUXEMBOURG	(2)
		BOLIVIA	(24)	SOLOMON ISLS.	(2)
		URUGUAY	(23)	BULGARIA	(2)
				BRUNEI	(2)

Exhibit B

Classification of GRE Foreign Examinees According to Country of Citizenship and World Region

COUNTRY OF CITIZENSHIP AND REGION	N
AFRICA-TOTAL 8.2%	(2173)
ALGERIA	(101)
ANGOLA	(3)
BOTSWANA	(7)
CAMEROON	(45)
CENTR. AFRICAN R.	(3)
CHAD	(2)
CONGO	(3)
BENIN	(2)
EGYPT	(176)
ETHIOPIA	(70)
GHANA	(143)
GUINEA	(2)
IVORY COAST	(33)
KENYA	(118)
LIBERIA	(50)
LIBYA	(48)
MALAWI	(25)
MALI	(20)
MOROCCO	(32)
MOZAMBIQUE	(3)
NIGERIA	(883)
ZIMBABWE	(41)
SENEGAL	(6)
SIERRA LEONE	(39)
SOMALIA	(14)
SOUTH AFRICA	(112)
SUDAN	(34)
SWAZILAND	(22)
TANZANIA	(41)
TOGO	(5)
TUNISIA	(19)
UGANDA	(39)
UPPER VOLTA	(3)
ZAMBIA	(29)
AMERICA-TOTAL 16.2%	(4297)
BAHAMAS	(29)
BARBADOS	(13)
BELIZE	(10)
BERMUDA	(11)
COSTA RICA	(46)
CUBA	(70)
DOMINICAN REPUBLIC	(36)
EL SALVADOR	(28)
GUATEMALA	(42)
HAITI	(30)
HONDURAS	(31)
JAMAICA	(155)
MEXICO	(631)
NETH. ANTILLES	(21)
NICARAGUA	(37)
PANAMA	(51)
PUERTO RICO	(12)
TRINIDAD & TOBAGO	(85)
WEST INDIES ASSO.	(25)
CANADA	(1470)
ARGENTINA	(127)
BOLIVIA	(24)
BRAZIL	(294)
CHILE	(128)
COLOMBIA	(236)
ECUADOR	(45)
GUYANA	(53)
PARAGUAY	(8)
PERU	(130)
URUGUAY	(23)
VENEZUELA	(396)
ASIA-TOTAL 54.6%	(14443)
AFGHANISTAN	(5)
BANGLADESH	(156)
BHUTAN	(9)
BRUNEI	(2)
BURMA	(7)
TAIWAN	(3791)
HONG KONG	(674)
INDIA	(4210)
INDONESIAN	(275)
JAPAN	(894)
KAMPUCHEA	(5)
KOREA	(1547)
LAOS	(8)
MACAO	(50)
MALAYSIA	(628)
MAURITIUS	(8)
MONGOLIA	(9)
NEPAL	(37)
PAKISTAN	(266)
PHILIPPINES	(467)
SINGAPORE	(150)
SRI LANKA	(167)
THAILAND	(778)
VIETNAM	(154)
PEOPLES R. OF CHINA	(146)
EUROPE-TOTAL 11.0%	(2920)
TURKEY	(248)
AUSTRIA	(27)
AZORES	(12)
BELGIUM	(75)
BULGARIA	(2)
CYPRUS	(61)
CZECHOSLAVAKIA	(12)
DENMARK	(27)
GREAT BRITAIN	(599)
FINLAND	(35)
FRANCE	(297)
FED. R. OF GERMANY	(267)
GERMAN DEM. REP.	(20)
GREECE	(424)
HUNGARY	(6)
ICELAND	(51)
IRELAND	(100)
ITALY	(124)
LUXEMBOURG	(2)
MALTA	(3)
NETHERLANDS	(85)
NORWAY	(47)
POLAND	(43)
PORTUGAL	(49)
ROMANIA	(10)
SPAIN	(127)
SWEDEN	(63)
SWITZERLAND	(55)
U. S. S. R.	(8)
YUGOSLAVIA	(41)
MIDEAST-TOTAL 8.8%	(2316)
BAHRAIN	(25)
IRAN	(1119)
IRAQ	(92)
ISRAEL	(187)
JORDAN	(192)
KUWAIT	(66)
LEBANON	(332)
OMAN	(3)
QATAR	(8)
SAUDI	(222)
SYRIA	(53)
U. ARAB EMIRATES	(14)
YEMEN	(3)
PACIFIC-TOTAL 1.2%	(306)
AMERICAN SAMOA	(8)
AUSTRALIA	(210)
CAROLINE ISLANDS	(3)
FIJI ISLANDS	(17)
MARIANA ISLANDS	(3)
NEW CALEDONIA	(3)
NEW ZEALAND	(55)
SOLOMON ISLANDS	(2)
TONGA	(5)
ALL NON-U. S.	(26455)

most of the examinee contingents were relatively small: 98 countries were represented by fewer than 100 examinees, 81 by fewer than 50.

- o Twenty-five countries with 200 or more examinees accounted for 21,158 (80 percent) of the foreign examinees who named a country (N = 26,455).

- o Almost 55 percent of all foreign examinees were from the Asian region; some 16 percent were from the Americas (including Canada), 11 percent from Europe, 9 percent from the Mideast, 9 percent from Africa, and about 1 percent from the Pacific region (primarily from Australia and New Zealand).

- o Ten of the 25 countries represented by 200 or more examinees, including the three countries with the largest number of nationals taking the GRE (India, Taiwan, and Korea), were from the Asian region.

- o The percentages of regional totals accounted for by the leading countries varied considerably; the 10 Asian contingents among the leading 25 accounted for almost 94 percent of the Asian total; the three leading contingents from the Mideast accounted for about 72 percent of that region's total. Among the remaining regions, the percentages accounted for by contingents included among the leading 25 were 70.4 percent for the Americas, 68.6 percent for the Pacific, 62.8 percent for Europe, and 40.6 percent for Africa.

- o Some 19 percent of the foreign examinees reported that they were resident aliens (permanent residents) in the U.S.; 80 percent of all foreign examinees were accounted for by the 25 countries with the largest number of examinees, but only about 70 percent of resident aliens were from these countries (Table 1, Appendix B).

Fields of Study

Foreign nationals in the GRE examinee pool were generally more heavily concentrated in scientific and technical fields (engineering, math-science, physical science) than were U. S. examinees (Table 3, Table 6).* More than one half (52 percent) of all foreign examinees as compared to only about 15 percent of U.S. examinees were in these science fields.** Thus the representation of foreign nationals in the total population varied markedly by field.

- o About 17 percent of all GRE test-takers during 1981-82 (including those not naming a country of citizenship) were non-U.S. citizens. However, it is estimated (a) that foreign nationals made up (at least) 47 percent of examinees in the engineering fields, 33 percent of those in the

*Unless otherwise indicated hereafter, references to tables should be understood to mean the tables in Appendix B.

**See Appendix A for listing of the specific disciplines included in these and other classifications.

math-science fields, and 20 percent of those in the physical sciences and (b) that, in certain of the specific engineering fields, foreign examinees were the majority population--for example, 69 percent in metallurgy; and more than one half in civil, mechanical, and industrial engineering.*

- o More than one-third of all GRE examinees in economics, computer science (the most popular single field for foreign examinees), physics and statistics, were foreign as were one fourth in chemistry, and one fifth of architecture and mathematics majors.

- o On the other hand, foreign examinees were underrepresented in education, arts, social sciences, generally, and health fields (between 4 and 8 percent); also in behavioral and biological sciences, and humanities exclusive of arts (10 to 12 percent).

Variability in English Language Backgrounds

Slightly more than one-third of all foreign examinees reported that they communicated better in English than in any other language; these were classified as EPL examinees, for whom English is the primary language;* the remaining 63 percent reported better communication in a language other than English and these were classified as ESL examinees, for whom English is a (the) secondary language (Table 2).

Among the leading 25 largest national groups, those from three major native English-speaking societies (Australia, Canada, and Great Britain) were more than 90 percent EPL; between 40 percent and 71 percent of examinees reported EPL status in contingents from India (71 percent), the Philippines (70 percent), Nigeria (66 percent), Malaysia (52 percent), and Pakistan (40 percent); less than 20 percent of the examinees in the remaining 17 leading contingents reported EPL status (Table 5).

For EPL contingents from Australia, Canada, and Great Britain (and other native English-speaking societies), native patterns of English language acquisition and usage may be assumed. However, for most of the remaining EPL

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* The percentages of examinees in various fields or areas of graduate study do not take into account data for 5,336 foreign nationals who failed to identify a country of citizenship, while the estimate of 17 percent in the GRE general population does. Thus, these percentages by major areas or fields underestimate the representation of foreign examinees (by about 2.5 percent on the average). Generalizations about the general degree of representation of foreign nationals in subgroups defined by major field, or other subgroups, are not affected by this, however.

** Almost one-half of all foreign examinees taking the GRE during 1977-79 reported EPL status (Wilson, 1982a).

examinees, it is reasonable to assume non-native patterns of English language acquisition and usage. For this latter group of EPL examinees, EPL status undoubtedly was acquired through the study and use of English as a second language that, over the years, may have come to supersede the original native language, especially for academic purposes. In essence, it should not be assumed that EPL examinees from non-native English-speaking societies are comparable in English proficiency with EPL examinees from the United States or other major English-speaking societies. This distinction is relevant to the assessment of differences among country contingents in performance on the GRE verbal measure (see Table 11).

English Proficiency and Test Performance

The performance of foreign examinees on the GRE quantitative ability measure appears to be fully comparable with that of U.S. examinees in similar fields of study, but the verbal and analytical ability scores of foreign examinees are consistently lower than those of their U.S. counterparts (see Figure 1).

Foreign EPL examinees have higher verbal and analytical means than their ESL counterparts, but their verbal and analytical score profiles are consistently below those of U.S. examinees; however, quantitative ability profiles for foreign ESL, foreign EPL, and all examinees in similar fields of study are quite comparable (see Figure 2).

The fact that the verbal and analytical profiles in Figure 2 for foreign EPL examinees do not conform more closely in level to the "all GRE" profiles for these measures, while their quantitative profiles do, is noteworthy. In evaluating this phenomenon it is important (a) to recall that most foreign EPL examinees are from non-native English-speaking societies and (b) to know that the verbal (and analytical) ability profiles of EPL examinees from major English-speaking societies appear to be fully comparable to those of U.S. examinees, as will be seen below (see also Table 11).

Generally speaking, among the leading 25 foreign contingents, differences in level of verbal performance, but not level of quantitative performance, are associated with variables reflecting characteristic differences in the English-language backgrounds of graduate-level examinees from these countries who are studying or who plan to study in the United States. Basic trends in this regard are pointed up in Exhibit C in which data on GRE verbal performance relative to quantitative performance are shown for mathematics and physical science majors from the 25 leading foreign contingents.

Along the horizontal in Exhibit C, countries are differentiated first according to native vs non-native patterns of English-language acquisition and use; the non-English-speaking countries are then further differentiated in terms of the typical level of performance of their U.S.-graduate-school-bound nationals on the Test of English as a Foreign Language (TOEFL). TOEFL (ETS, 1981) measures ability to comprehend spoken English, knowledge of rules regarding English language structure and expression, and English vocabulary and reading comprehension, and reports a total score reflecting performance on

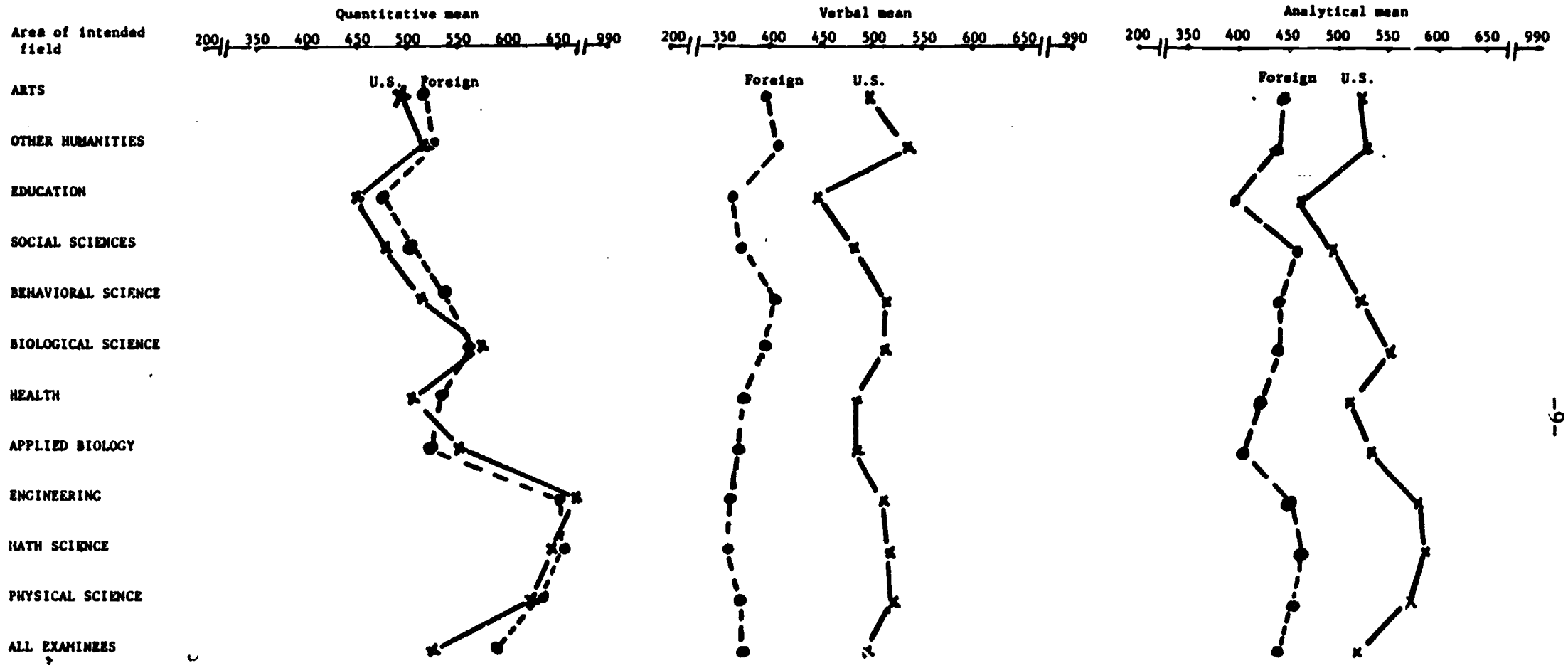

Figure 1. Profiles of GRE General Test means for U.S. and foreign examinees in 11 graduate major areas

See main report, Section 4 for supporting detail

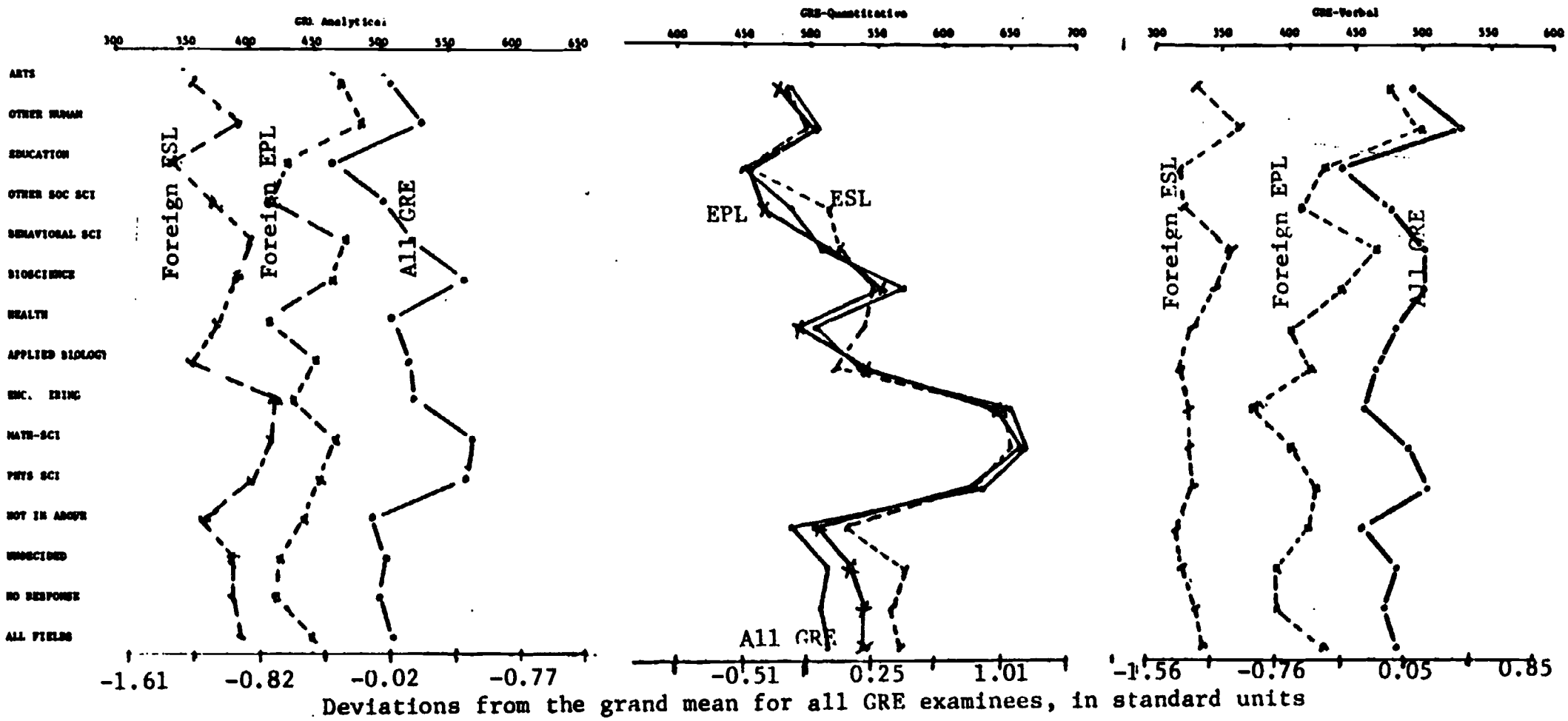

Figure 2. Profiles of verbal, quantitative, and analytical means for all GRE examinees and for foreign examinees in 11 graduate major areas: Foreign examinees classified by EPL/ESL status

Exhibit C

Variation in Level of GRE Verbal Relative to Quantitative Performance by Country of Citizenship As a Function of Differences in English Language Background: Math/Science Majors Only

Percentage of GRE examinees, 1981-82, reporting English as the primary language of communication	Characteristic level of English proficiency of contingents of graduate-level students planning to study in the United States					
	Non-native patterns of acquisition and use				Native pattern of English language acquisition and use	
	Lower mean TOEFL scores*		Higher mean TOEFL scores*			
66 percent + EPL			Nigeria	-105 (520)+	Australia	-01 (714)++
			India	- 97 (656)++	Canada	-11 (708)++
			Philippines	- 60 (605)++	Great Britain	-22 (660)++
					United States	00 (645)++
33-65 percent EPL	Pakistan	-152 (580)+	Malaysia	-136 (626)++		
Less than 33 percent EPL	Mexico	-122 (576)++	France	-118 (691)++		
	Brazil	-123 (629)++	West Germany	-129 (675)++		
	Colombia	-127 (612)++				
	Venezuela	-126 (572)+				
	Greece	-177 (655)++				
	Turkey	-200 (648)+				
	Iran	-192 (591)+				
	Lebanon	-184 (597)+				
	Saudi Arabia	-199 (542)+				
	Taiwan	-251 (703)++				
	Hong Kong	-198 (700)++				
	Indonesia	-213 (638)++				
	Japan	-251 (701)++				
	Korea	-212 (696)++				
	Thailand	-228 (624)++				

- First entry following country is the discrepancy between observed and predicted verbal mean, where predicted verbal is given by .52Q + 185, an equation based on data for U.S. math/science majors
- The parenthetical entry is GRE quantitative mean for math/science majors in the contingent
- ++GRE-Q mean is at or above the 70th centile (reference group, all examinees tested between 10/78 and 09/81, U.S. and foreign, (ETS, 1982, Table 3A)
- +GRE-Q mean approximately at or above 50th centile, same reference group.

*Classification of countries by TOEFL score level is based on data for graduate-level TOEFL examinees from the country, tested during 1977-79 (Wilson 1982a). "Higher" level = mean TOEFL Total of 550 or more; "lower" = below 530, typically around 500.

all three dimensions. It is designed for use by foreign nationals who need to demonstrate their proficiency in English. Data for examinees tested during 1977-79 (Wilson, 1982b) were used to classify the non-native English-speaking countries in terms of higher vs lower TOEFL total means (higher means of 550 or greater vs lower means below 550, typically near 500). Countries are classified, vertically, according to the percentage of self-reported EPL examinees in the 1981-82 contingents of GRE General Test takers.

For each mathematics and physical science contingent, the first entry following the country name is the discrepancy between the observed GRE verbal mean (Table 16, Appendix B) and the verbal mean predicted from the mean score on the quantitative ability measure, using a regression equation based on data for U.S. mathematics and physical science majors (Table 9): predicted GRE Verbal = .52 GRE-Q + 185.* The entry following this discrepancy is the mean score for the contingent on the GRE quantitative ability measure; the symbols (++ or +) indicate the general level of the percentile rank corresponding to the quantitative mean in a basic GRE reference group (see note in Exhibit C for detail).

The data in this exhibit highlight the relationship between the English-proficiency related variables and the discrepancy between verbal performance and quantitative performance for the 25 largest groups of foreign test takers. Several features are noteworthy.

- Performance on the GRE quantitative ability measure appears to be independent of the classification of a country group according to the English-language background variables. High quantitative means are present in every category.

- Verbal performance generally consistent with expectation based on quantitative scores is evident only for examinees from Australia, Canada, and Great Britain, more than 90 percent of whom report English as the primary language, and for whom a native pattern of English-language acquisition and use is assumed. For these three groups of examinees, the observed mean verbal score was very close to the mean expected for U.S. mathematics and physical science majors with similar quantitative means.

*This equation was derived using means and standard deviations for U.S. mathematics and physical science majors (Table 9) and an estimate of .5 for the verbal to quantitative score correlation. (The 1982-83 Guide to the Use of the Graduate Record Examinations [ETS, 1982] reports a correlation coefficient of .475 for a general sample of mathematics and physical science examinees, including foreign nationals. For purposes of the present study, the rounded value, .5, was deemed to be a reasonable estimate for U.S. examinees only.) For U.S. mathematics and physical science majors in the present study the observed verbal and quantitative means were 520 and 645, respectively, and their "estimated verbal mean" is, by definition, 520. Thus the "observed minus predicted verbal" residual for U.S. examinees in Exhibit C is zero.

- At the other extreme are examinees from Mideastern and Asian countries with very low percentages of EPL examinees (whose EPL status is assumed to have been acquired through study and use of English as a second language), whose native languages do not overlap with English, and whose nationals planning to study in the U.S. characteristically earn lower average scores on TOEFL. The verbal means for these groups of examinees were from 184 to 251 scaled score points lower than would be expected for U.S. examinees with comparably high quantitative means.

- The verbal performance of examinees from countries with comparatively high percentages of non-native EPL examinees, whose U.S. graduate-school-bound nationals typically do well on TOEFL, is below expectation, but for these examinees (from India, Nigeria, and the Philippines) the discrepancy between the observed and expected verbal mean ranges only between 60 and 105 points.

  These discrepancies are somewhat lower than those for French and West German nationals (118-129 points); these contingents include very few non-native EPL examinees, but U.S. bound nationals from these two countries typically perform very well on TOEFL. Examinees from Greece and Turkey, whose U.S.-bound nationals typically do not perform very well on TOEFL, have considerably higher discrepancies (177 and 200 points, respectively) between observed and predicted verbal score.

- Examinees from Mexico, Brazil, Columbia, and Venezuela (characteristically lower-scorers on TOEFL) have verbal discrepancies similar to those of the French and German examinees (around 125 points) but their means were more consistent with expectation than those of the Mideastern and Asian or the Greek and Turkish examinees.

From the foregoing, it is reasonable to conclude that differences in average verbal (and analytical) test performance between U.S. and foreign ESL test takers or between contingents of foreign examinees from various non-native English-speaking societies reflect factors associated with differences in levels of English proficiency (including, for example, speed of verbal processing in a nondominant language). At the same time, the findings reviewed suggest that differences in the average quantitative scores of examinees by country of citizenship are relatively independent of the varied patterns of English language acquisition and use that are characteristic of examinee contingents from the different countries. However, since the quantitative items are heavily embedded in a matrix of English language directions and stems, it is possible that even the high level of performance of foreign ESL examinees generally, or from particular countries, on this measure may be invalidly lowered by less-than-native levels of fluency in English.

Examinee Characteristics and GRE Performance

Comparable data on the selected personal, academic, and testing-related characteristics of U.S. and foreign examinees generally are provided in Tables 2, 3, and 4 (Appendix B), and parallel data are provided for examinees classified by country of citizenship in Tables 5, 6, and 7. Data on GRE performance

in relation to the examinee characteristics are provided for the U.S. and general foreign examinee populations in Tables 8, 9, and 10; Table 11 shows GRE performance data for foreign examinees by country of citizenship and world region, while Tables 12, 13, 14, 15, and 16 provide data on GRE performance in relation to examinee characteristics by country and world region.

With regard to every variable under consideration, there was marked variability by country of citizenship in the composition of examinee contingents. For example, the percentage of males ranged from 38 through 98; mean age ranged from approximately 24 through 30 years; percentage tested in the U.S. ranged from 14 through 96; percentage attending a U.S. undergraduate school ranged from 8 to 80; the percentage of examinees from families in which the father had completed a four-year college degree ranged from 12 through 68; and similar diversity in the composition of examinee contingents, by country, is evident with respect to all other examinee characteristics.

The limited summary, below, is designed primarily to highlight (a) similarities and differences in the composition of the U.S. and general foreign examinee populations with respect to the basic study variables (that is, sex, age, parental eduction, educational status, and so on) and trends across the leading contingents and (b) similarities and differences in relationships between the selected examinee characteristics and GRE performance in the respective general populations and across countries.

o Sex. Males predominated among foreign examinees (73 percent vs 43 percent for U.S. examinees). Males constituted a majority in 24 of the 25 leading contingents (Tables 2 and 5).

GRE performance. Male examinees had higher quantitative means than females--true for the U.S. and general foreign examinee populations (with control for graduate major areas of study), and for all 25 of the leading contingents in comparisons not controlled for field of study (Tables 8 and 16).

o Age. Foreign and U.S. examinees had comparable mean ages (26.4 vs 26.7 years), but proportionately fewer foreign examinees were below 23 years or over 30 years of age. In 12 of the 25 leading contingents, the mean age of examinees was greater than that for U.S. examinees (Tables 2 and 5).

GRE performance. Younger examinees (less than 27 years of age) had higher means than their older counterparts on both the quantitative and analytical measures--true for all of the 25 leading contingents as well as for the U.S. and general foreign examinee populations (Tables 8 and 13). For foreign examinees generally and for the majority of leading contingents, but not for U.S. examinees, this was true for verbal means as well.

o Parental educational attainment. Some 44 percent of foreign and 43 percent of U.S. examinees reported that their fathers completed a four-year college degree; 33 percent of foreign as compared to 56 percent of U.S. examinees reported that their mothers had been educated

beyond the high school level. For 12 of the 25 leading contingents, reported father's educational level was greater than that for U.S. examinees, but this was true of mother's educational level for only one foreign contingent, namely, the Philippines (Tables 2 and 5).

In evaluating these data it is important to keep in mind that higher education enrollment rates (for example, the number of individuals enrolled in higher education as a percentage of the total population), historically have been much greater for the United States than for other countries. Based on data for the mid-1960s, for example, higher education enrollment rates for 11 of the 25 countries with 200 or more GRE examinees were less than one-tenth that for the U.S., while for 23 of the 25, the rate was less than one-half that for the U.S. (Taylor & Hudson, 1972). Thus, it is reasonable to infer that foreign examinees are more highly selected in terms of father's educational level, relative to their respective populations, than are U.S. examinees.

GRE performance. Examinees from families characterized by higher parental educational attainment had higher means on all three measures—true for both the U.S. and general foreign examinee populations, and with minor exception for the 25 leading foreign contingents (see Tables 8 and 13).

- Sex distribution vs mother's educational attainment by country. It is assumed that differences in the sex distribution of examinees across countries reflect differences in national custom and tradition affecting women's roles and status, their access to higher education, and their choices of particular fields of study. The assumption is supported by the fact that among the 25 largest examinee groups, as the percentage of examinees reporting mother's education beyond the high school increased, the percentage of females in the contingent also increased (Table 5).

- EPL vs ESL status. Some 63 percent of all foreign examinees were ESL examinees (who reported English as the secondary language of communication) while 37 percent were in the EPL category (Table 2). Three of the leading 25 contingents were 90 percent EPL, namely, those from Australia, Canada, and Great Britain; native patterns of English language acquisition and usage may reasonably be assumed for these EPL examinees. Other groups with relatively high EPL percentages were those from India, Nigeria, and the Philippines (roughly 70 percent), and Malaysia and Pakistan (about 50 percent and 40 percent, respectively); acquisition of EPL status as a bilingual is assumed for the majority of self-reported EPL examinees from these and other countries in which English is not the autochthonous language (Table 5). Most of the examinee contingents were relatively homogeneous linguistically—for 16 of the 25, a single language was reported as the native or best language by 80 percent or more of all examinees.

  GRE performance. In the general foreign examinee population, those reporting EPL status had a higher verbal (and analytical) mean than their ESL counterparts, but had a lower mean on the quantitative

measure; in 21 of the 25 largest groups, self-reported EPL status was associated with higher verbal means, and the higher verbal/lower quantitative pattern was present in 19 of the 25 groups (see Tables 8 and 13). It is possible that this tendency may be accounted for by similarities across countries in patterns of differences between EPL and ESL subgroups with respect to field or sex-mix. EPL examinees regardless of country of origin do not appear to have an advantage on the quantitative measure, but typically do perform better than their ESL counterparts on the verbal test.

o U.S. residency status. Some 19 percent of all foreign examinees were resident aliens. However, this status was characteristic of between roughly 24 percent and 31 percent of examinees from all world regions except Asia--only 13 percent of Asian examinees reported resident alien status. The largest resident alien examinee contingents were from India, Iran, Canada, and Korea, in that order (Tables 1, 3, and 6).

GRE performance. Resident aliens had lower means than other foreign examinees on all three GRE measures. For the quantitative measure this was true for each of the 25 leading contingents, and resident aliens had lower analytical means as well in 23 of the 25 contingents (see Tables 9 and 12). Without control for field of study and sex, these comparisons should be evaluated tentatively.

o Educational status at time of testing. Proportionately fewer foreign than U.S. examinees were enrolled undergraduates (29 percent vs 45 percent) and proportionately more were either nonenrolled master's degree holders (16 percent vs 8 percent) or were not classifiable according to one of the status categories provided (13 percent vs 5 percent) [Table 3]. For 23 of the 25 leading contingents, the percentage of nonenrolled master's degree holders was greater than that for the U.S. examinee population (Table 6).

GRE performance. Among U.S. and foreign examinees generally, and in most of the largest 25 country groups, those taking the GRE General Test as enrolled undergraduates had higher quantitative and analytical means than examinees generally or than those in other enrollment statuses. This pattern is generally consistent with observed differences in GRE performance by age--younger examinees earned higher scores and, theoretically, are more likely to be enrolled undergraduates. There may also be differences by enrollment status with respect to major field and sex-mix (see Tables 9 and 14).

o Degree goal. Proportionately more foreign than U.S. examinees planned to study toward a doctoral degree (45 percent vs 37 percent), and this was true for examinees from 15 of the 25 leading contingents (Tables 3 and 6).

GRE performance. Examinees with a doctoral degree goal had higher mean verbal, quantitative, and analytical scores than those working toward a master's degree in both the U.S. and general foreign examinee

population—true for the majority of the leading contingents (see Tables 9 and 12).

o Intended field. As previously noted, foreign examinees were very heavily concentrated in mathematics and physical sciences--engineering, math-sciences, and physical sciences accounted for 52 percent of foreign examinees as compared with only 15 percent of U.S. examinees; an additional 27 percent were in social science fields that accounted for 49 percent of all U.S. examinees. Thus, these two broad areas accounted for almost 80 percent of all foreign examinees. Only one group of examinees (that from Canada) was not more heavily oriented to the scientific and technical areas than U.S. examinees (Tables 3 and 6).

GRE performance. Intended majors in the arts and humanities and social sciences had lower quantitative scores than majors in biological and math and physical science fields, and the quantitative mean for math and physical science majors was markedly higher than that for other majors in both the U.S. and general foreign examinee populations. This was true for most of the 25 largest country groups. In the general foreign examinee population and in most of the 25 leading contingents, arts and humanities majors and, to a lesser extent, social science majors had higher verbal means than examinees generally, or than physical science majors. Among U.S. examinees this was true for arts and humanities majors only.

o U.S. undergraduate origin. Somewhat more than one-fourth (28 percent) of foreign examinees reported a U.S. undergraduate school. As might be expected, there was substantial positive correlation across countries between percentage reporting resident alien status and percentage reporting a U.S. undergraduate institution (Tables 3 and 6).

GRE performance. As was true for resident aliens, examinees reporting a U.S. undergraduate school had lower means than other examinees on the verbal, quantitative, and analytical measures. This was true for the quantitative measure in 22 of the 25 largest groups but was not so consistently true for the verbal measure (see Tables 9 and 12). Here again field of study was not controlled.

o Location of test center. Some 41 percent of all foreign examinees--over 80 percent of Mideastern and 66 percent of African examinees--were tested in a U.S. center. Countries represented by higher percentages of resident alien examinees tended to have higher percentages of examinees tested in U.S. centers, as would be expected (Tables 4 and 7).

GRE performance. Foreign examinees tested in the U.S. had substantially lower scores on all three GRE measures than their counterparts tested elsewhere. This was true for quantitative performance for each of the 25 leading contingents, for analytical performance in 23, and for verbal performance in 19 of the 25 groups (see Tables 10 and 12). There is no ready explanation for this finding.

o Incidence of repeating test-takers. About equal percentages of U.S. and foreign examinees (13 per nt vs 15 percent) reported previous experience with the GRE General Aptitude Test—that is, were repeaters. However, there was substantial variation across countries in the incidence of repeaters (Tables 4 and 7).

GRE performance. First-time test takers in the foreign examinee population had higher means than repeating examinees on all three measures, although this was not consistently true across countries. Incidence of test repetition(percent repeaters) tended to decrease as level of verbal performance increased (see Tables 10 and 16).

o Score reporting to schools and departments. At the time of the most recent test administration, foreign examinees were less inclined to designate particular schools or departments as score recipients than their U.S. counterparts (74 percent as compared to 87 percent). This was true for examinees from 24 of the 25 countries. Among foreign examinees who did report scores, the mean number of schools or departments designated (2.2) was slightly greater than for U.S.examinees who reported scores (2.0). This was true for 19 of the 25 leading contingents (Tables 4 and 7).

Link between incidence of repeated test taking and incidence of score reporting. There was substantial positive correlation between percentage of repeaters and percentage of nonreporting examinees across countries; both the tendency to repeat the GRE and the tendency not to report scores, for foreign examinees, appear to be linked to level of verbal performance (see especially data in Tables 7, 10, and 16).

GRE performance. In the foreign examinee population, those reporting scores to schools or departments had higher verbal means than their nonreporting counterparts—this was true for 22 of the 25 country contingents. Across countries, contingents with higher percentages of repeaters tended to have higher percentages of nonreporters. Among foreign examinees, both test repetition and failure to designate particular departments to receive score reports may be linked, conceptually, to lower than expected performance on the verbal measure (cf. Tables 10 and 16). A similar link between these testing-related variables has been found to obtain for U.S.-graduate-school-bound TOEFL-takers (Wilson, 1982b).

o GRE Subject Test taking. In both the foreign and U.S. examinee populations, about one examinee in five who took the GRE General Test also took a Subject Test. Percentages taking a Subject Test varied markedly by country, however, being highest among European examinees and lowest among examinees from African and Mideastern countries (Tables 4 and 7).

GRE performance. In the U.S. and general foreign examinee populations, those taking a Subject Test had higher means on all three General Test measures than those who did not do so.

A Brief Summary

To summarize very generally, comparative profiles of examinee characteristics, and an indication of the direction of the difference between the designated subgroup means and the respective general population means, for the U.S. and general foreign examinee populations are shown in Figure 3.

Personal Characteristics

As compared to U.S. examinees, the general foreign examinee contingent included proportionally more males (with higher scores than females in both populations), but proportionally fewer enrolled undergraduates and younger examinees below 23 years of age (and both these subgroups had higher average GRE scores than their respective population means).

About equal percentages of U. S. and foreign examinees reported that their fathers had completed a four-year college degree; proportionally fewer foreign examinees reported mother's education beyond the high school level (in both of the general populations, higher levels of parental education were associated with GRE score averages above the population mean).

Only 37 percent of foreign examinees as compared with 98 percent of U.S. examinees reported EPL status, and within both contingents EPL status was associated with higher averages on the verbal and analytical measures than ESL status, consistent with expectation.

Academic Characteristics

Proportionally more foreign examinees reported a Ph.D. degree goal and, in both populations, Ph.D. seekers earned higher GRE scores than master's degree seekers). More than one-half of foreign examinees, but only 15 percent of U.S. examinees, were in mathematics and physical science fields (with quantitative scores averaging above the respective population means); almost half of U.S. examinees, but only about one-fourth of foreign examinees, were in social sciences (with quantitative score means below population levels). And, the two examinee populations differed rather sharply with respect to the percentage of examinees taking the GRE as enrolled undergraduates (with typically higher quantitative scores), consistent with differences in the proportion of younger examinees (< 23 years).

Testing Related Characteristics

Foreign examinees tested in the U.S. (41 percent) tended to have lower GRE scores than foreign examinees generally, as did those who reported attending a U.S. undergraduate institution (28 percent) and resident alien status (19 percent), respectively (data not shown in Figure 3).

Incidence of test repetition was about equal in the general foreign and U.S. examinee populations and repeaters had lower quantitative scores than nonrepeaters in both populations. Foreign examinees were less inclined to

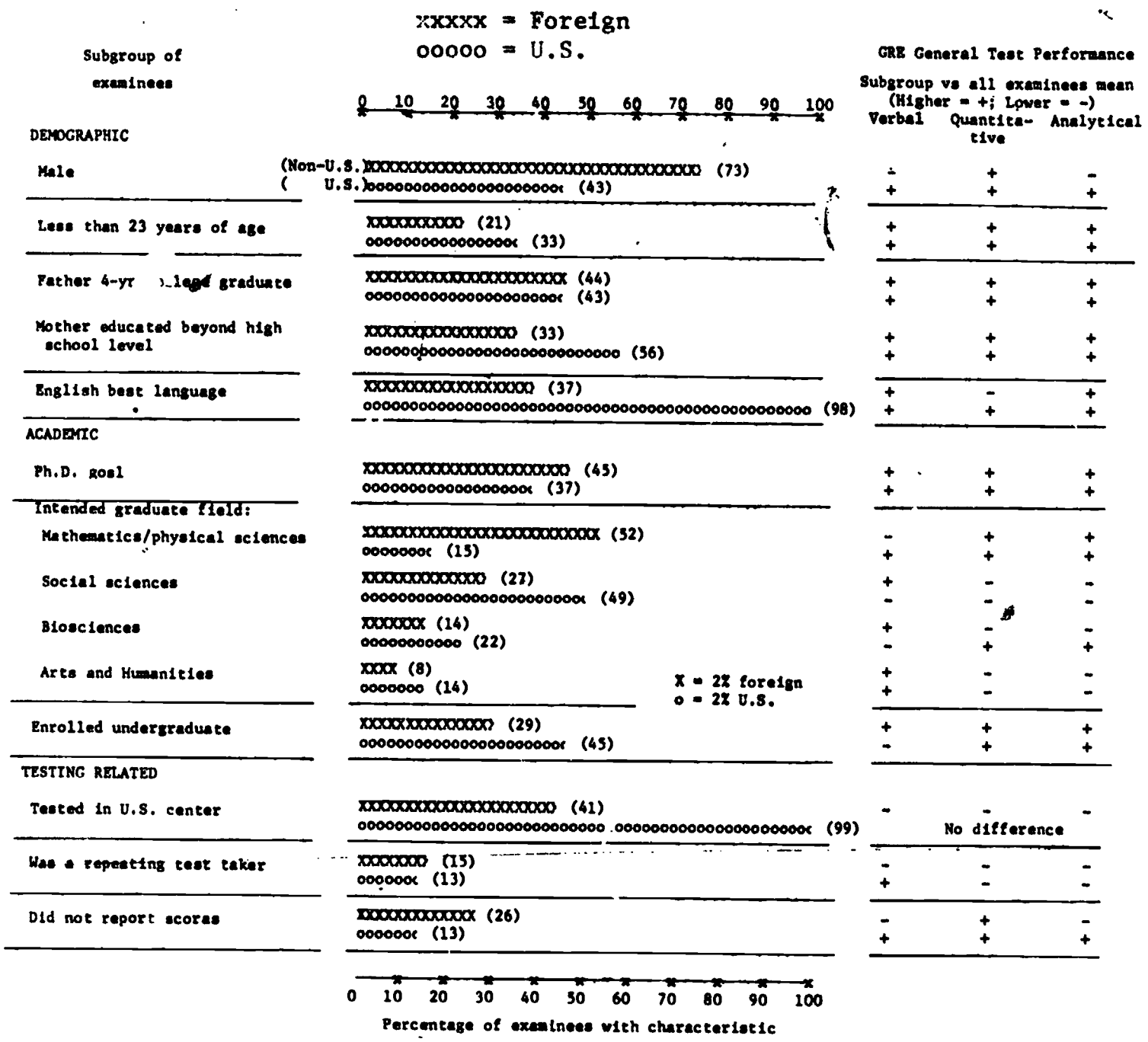

Figure 3. Representation of various subgroups in the U.S. and general foreign examinee populations, and the direction of differences between subgroup and population means on the GRE General Test: 1981-82

designate an institution or department to receive their GRE score report than their U.S. counterparts.

With respect to the foregoing, although there were differences in the composition of the largest 25 groups of foreign GRE examinees with respect to the characteristics under consideration, the patterns of subgroup differences in GRE performance tended to be similar in most of the country groups—that is, for example, in all or most of the groups, younger examinees had higher GRE score means than older ones, males had higher quantitative means than females, and so on.

Finally, in the comparisons involving the GRE quantitative measure in Figure 3, the direction of subgroup differences was the same within both the U.S. and the general foreign examinee populations in 11 of 13 instances, but this was true for the verbal and/or analytical measure in only 7 of 13 comparisons. This is consistent with evidence (for example, Exhibit C) that performance on the quantitative measure, but not performance on the verbal and analytical measures, is relatively independent of linguistic-cultural background variables.

Discussion

The average quantitative performance of foreign examinees generally appears to be comparable to that of U.S. examinees in similar fields of study, but their average verbal (analytical) performance falls consistently below that of their U.S. counterparts. It is reasonable to infer that this is due to factors associated with their less-than-native levels of fluency in English, including diminished speed of verbal processing in the nondominant language.

In evaluating this, it should be noted that for U.S. examinees the GRE General Test measures primarily differences in level of developed verbal, quantitative, and analytical reasoning abilities—that is, these measures have been found to be relatively unspeeded in samples of U.S. examinees classified by age, ethnic group, and sex (Wild & Durso, 1979). However, foreign examinees from non-English-speaking societies have been found to have lower test completion rates than U.S. examinees on the verbal sections of the GRE General Test (Angelis, Swinton, & Cowell, 1979), and on the verbal sections of the Graduate Management Admission Test (GMAT) as well (Sinnot, 1980)—that is, there is evidence suggesting that standard U.S. graduate-level verbal admission tests are measuring speed of verbal processing as well as level of developed verbal ability in samples of foreign ESL examinees. These findings are consistent with those from research on speed of processing and language dominance focused primarily on the "decoding (comprehension) and encoding (production) of spoken language" (emphasis added), reviewed by Dornic (1980).

Research is needed to establish the average levels of performance attainable by foreign and U.S. examinees on the GRE verbal measure under essentially unspeeded conditions. Similar research is needed for the analytical and quantitative measures even though, on the latter, the performance of foreign-ESL examinees is fully comparable to that of U.S. citizens.

Such research would be most enlightening if conducted for contingents of examinees selected according to discrepancy between observed verbal score and that predicted from quantitative score using a regression equation based on U.S. examinees. This Relative Verbal Performance Index (RVPI) may be thought of as indexing an "English proficiency deficit" (EPD) in level of verbal performance relative to quantitative performance (see Exhibit C and related discussion). It is reasonable to hypothesize (a) that for examinees with very low RVPI scores, GRE scores tend to be affected by low levels of English proficiency, and (b) that the degree of speededness of the verbal (analytical) measure should be greater for examinee contingents with lower EPD indices (for example, Japan, Taiwan, Saudi Arabia), than for contingents with higher EPD indices (for example, India, Nigeria, the Philippines). It is equally plausible to hypothesize that the verbal measure is likely to be no more speeded for contingents from major English-speaking societies than for U.S. examinees.

If differences in verbal test performance between foreign ESL and U.S. examinees with comparable quantitative scores, in similar fields, are significantly influenced by differences in speed of verbal processing, then the graduate school performance of foreign ESL students is likely to be higher than expected for U.S. students with equally low verbal scores. As noted elsewhere (Wilson 1982b), under normal conditions of academic life, foreign ESL students typically may be able to compensate for relatively low speed of English language verbal processing (e.g., reading speed) by additional time on task. On the other hand, language is a variable that may affect both performance on the test and on the criterion measure of academic performance.

At this juncture, it is important to recognize that scattered studies of the predictive validity of scores on standard verbal admission tests (such as GRE verbal, GMAT verbal, and the Law School Admission Test) provide limited, but consistent, evidence that within samples of foreign students that are heterogeneous with respect to country of origin (and associated potentially attenuating variables), differences in verbal scores (as well as quantitative scores when used) tend to be positively related to differences in academic performance as measured by grade point average and/or faculty ratings (for example, Harvey & Lannholm, 1961; Harvey & Pitcher, 1963; Sharon, 1972; Schrader & Pitcher, 1976; Wilson, 1979; several unpublished GMAT studies conducted by the Graduate Management Admission Council Validity Study Service at ETS).

In these studies, where academic performance data were also available for U.S. students, the level of academic performance of foreign students was generally comparable to that of their U.S. counterparts despite their much lower verbal scores; quantitative scores typically were either comparable to or somewhat higher than those of U.S. students. These studies did not examine differences in predictive validity for examinees by country of citizenship.

In validation research involving foreign students, particular attention should be given to questions regarding predictive validity for examinees in subgroups that are homogeneous with respect to such variables as national origin, and/or native language, and measured level of English proficiency (for example, level of verbal performance relative to quantitative performance, score-level on TOEFL, and so on).

Questions regarding the comparative predictive validity of standard admission tests for foreign and U.S. students require empirical answers. It is important to extend the limited body of validity study evidence currently available on foreign students.* Evidence is needed regarding the academic performance of U.S. and foreign students, and of foreign students with different linguistic-cultural backgrounds, in relation to GRE scores.

It is equally important to study the performance of foreign examinees on the various GRE Subject Tests relative to their performance on the GRE General Test, to assess the degree of speededness of the GRE Subject Tests for foreign examinees, and to ascertain their predictive validity for foreign students. Since the verbal content of these tests is heavily discipline-oriented, in contrast to the general "curriculum free" orientation of the verbal items in the GRE General Test, it is hypothesized that for foreign examinees level of performance on the GRE Subject Tests is likely to be less influenced by linguistic and cultural variables than performance on the GRE General Test.

In an unusually thorough study at the undergraduate level, involving foreign students from Hong Kong in California System institutions, Wilcox (1974) found substantial predictive validity for the College Board Achievement Tests (an average based on two or three different achievement test scores that were available). He concluded: "Both the high achievement scores earned by the Hong Kong students and the validity of those scores in predicting freshman grades suggest that cultural bias is minimized in subject-matter proficiency tests" (p. 99).

Generally speaking, it seems evident that the periodic comparative summarization and analysis of data on the characteristics and the test performance of foreign nationals and U.S. examinees taking the GRE would provide information useful to the entire graduate community and, indeed, all agencies concerned with international students in the United States. While not all foreign nationals enrolled in U.S. graduate schools take the GRE, it is safe to assume that these test takers represent a very significant sample of foreign nationals studying or planning to study here. The standard data supplied by foreign nationals in registering for and taking the GRE constitute a basic resource for obtaining up-to-date and reliable information regarding their demographic, academic, and testing-related characteristics as well as their performance on standardized admission tests that are oriented linguistically, culturally, and educationally to U.S. citizens.

*The Graduate Record Examinations Board currently is sponsoring a special cooperative study of the predictive validity of GRE scores for foreign students in a variety of fields.

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Appendix A

Detailed Information on Data Sources

A-1

GRE Background Question Defining Citizenship Status, and Country of Citizenship Code List: 1981-82

B.1 Are you a United States citizen, a resident alien in the United States, or neither one? (Specify which one.)

(1) United States citizen
(2) Resident alien in the United States
(3) Neither a United States citizen nor a resident alien in the United States

If your answer to B.1 is (1), you need not answer B.2. Skip to C.

B.2 In the Country of Citizenship Code List on page 73, find the code of the country of which you are a citizen. Blacken the spaces for that country's code number.

COUNTRY OF CITIZENSHIP CODE LIST (for Question B.2)

301	Afghanistan	719	Costa Rica	325	India	743	Mexico	532	Solomon Islands
601	Albania	722	Cuba	328	Indonesia	657	Monaco	201	Somalia
101	Algeria	613	Cyprus	331	Iran	367	Mongolia	204	South Africa (Republic of)
501	American Samoa	616	Czechoslovakia	334	Iraq	176	Morocco	690	Spain
602	Andorra	619	Denmark	646	Ireland	178	Mozambique	394	Sri Lanka
102	Angola	126	Djibouti	337	Israel	522	Nauru	207	Sudan
901	Argentina	725	Dominican Republic	649	Italy	370	Nepal	754	Suriname
504	Australia	816	Ecuador	149	Ivory Coast	658	Netherlands	210	Swaziland
603	Austria	128	Egypt	740	Jamaica	746	Netherlands Antilles	663	Sweden
605	Azores	728	El Salvador	340	Japan	523	New Caledonia	686	Switzerland
701	Bahamas	131	Equatorial Guinea	343	Jordan	528	New Zealand	386	Syria
304	Bahrain	134	Ethiopia	346	Kampuchea	749	Nicaragua	319	Taiwan
307	Bangladesh	631	Federal Republic of Germany	152	Kenya	182	Niger	213	Tanzania
704	Barbados	510	Fiji	514	Kiribati	186	Nigeria	401	Thailand
607	Belgium	625	Finland	349	Korea	661	Norway	216	Togo
706	Belize	628	France	352	Kuwait	373	Oman	535	Tonga
125	Benin	818	French Guiana	355	Laos	376	Pakistan	758	Trinidad and Tobago
710	Bermuda	534	French Polynesia	358	Lebanon	752	Panama	219	Tunisia
310	Bhutan	137	Gabon	155	Lesotho	525	Papua New Guinea	404	Turkey
904	Bolivia	140	Gambia	158	Liberia	822	Paraguay	222	Uganda
104	Botswana	632	German Democratic Rep	161	Libya	487	People's Republic of China	666	Union of Soviet Socialist Rep
807	Brazil	143	Ghana	651	Liechtenstein	835	Peru	405	United Arab Emirates
313	Brunei	822	Great Britain	652	Luxembourg	378	Philippines	760	United States of America
610	Bulgaria	634	Greece	360	Macao	664	Poland	225	Upper Volta
316	Burma	637	Greenland	164	Madagascar	667	Portugal	826	Uruguay
107	Burundi	729	Grenada	853	Madeira	753	Puerto Rico	699	Vatican
110	Cameroon	730	Guadaloupe	167	Malawi	382	Qatar	831	Venezuela
761	Canada	513	Guam	361	Malaysia	671	Romania	407	Vietnam
114	Cape Verde Islands	731	Guatemala	364	Maldives	191	Rwanda	781	Virgin Islands
507	Caroline Islands	146	Guinea	170	Mali	678	San Marino	537	Western Samoa
716	Cayman Islands	147	Guinea-Bissau	665	Malta	192	Sao Tome and Principe	764	West Indies Associated States
118	Central African Republic	616	Guyana	516	Mariana Islands	386	Saudi Arabia	410	Yemen
119	Chad	734	Haiti	742	Martinique	194	Senegal	662	Yugoslavia
810	Chile	737	Honduras	519	Marshall Islands	196	Seychelles	228	Zaire
813	Colombia	322	Hong Kong	173	Mauritania	197	Sierra Leone	231	Zambia
121	Comoros	640	Hungary	366	Mauritius	391	Singapore	198	Zimbabwe
122	Congo	643	Iceland						

A-2

GRE Background Questions on English Communication Status, and Native Language Code List: 1981-82

F 1 Do you communicate better in English than in any other language?

(1) Yes (2) No

If your answer to E.1 is "Yes," you need not answer E.2. Skip to F.

E.2 Find your native (or best) language of communication in the list on page 73: The languages are arranged by geographic area for your convenience. Blacken the spaces for the code number shown. If you do not find your native (or best) language listed, blacken the spaces for code 000.

NATIVE LANGUAGE CODE LIST (for Question E.2)

AFRICA
101 Afrikaans
104 Akan
107 Amharic
510 Arabic
110 Bambara
111 Bemba
113 Berber
114 Chichewa
116 Efik
422 English
119 Ewe
434 French
122 Fulani
126 Ga
127 Galla
133 Hausa
136 Ibo
139 Kikongo
142 Kikuyu
176 Kiswahili
145 Lingala
148 Luba-Lulua
151 Luganda
153 Luo
156 Malagasy
158 Malinke (Mandingo)
162 Mende
461 Portuguese
164 Sangho
165 Sepedi
166 Sesotho
167 Setswana
169 Siswati
170 Shona
173 Somali
179 Tigrinya
182 Twi-Fante
185 Wolof
188 Yoruba
191 Zulu

AMERICAS
203 Aymara
419 Dutch
422 English
434 French
201 Guarani
461 Portuguese
206 Quechua
478 Spanish

ASIA
301 Assamese
304 Baluchi
305 Bengali
309 Bihari
307 Burmese
310 Cambodian (Khmer)
312 Cebuano
315 Chinese (Mandarin, Cantonese, etc.)
422 English
434 French
320 Gujarati
323 Hindi
326 Ilocano
328 Indonesian
331 Japanese
332 Javanese
335 Kannada (Kanarese)
338 Kashmiri
339 Kazakh
341 Khalkha Mongolian
340 Korean
342 Kurdish
343 Lao
345 Malay
346 Malayalam
348 Marathi
361 Nepali
353 Oriya
356 Punjabi
357 Pushtu
358 Rajasthani
360 Sindhi
361 Sinhalese
364 Sundanese
367 Tagalog
370 Tamil
371 Tatar
373 Telugu
376 Thai
379 Tibetan
382 Tulu
384 Uighur
386 Urdu
388 Vietnamese
391 Visayan
393 Yi
396 Zhuang

EUROPE
401 Armenian
404 Basque (Euskara)
407 Bulgarian
410 Catalan
413 Czech
416 Danish
419 Dutch
422 English
425 Estonian
428 Finnish
431 Flemish
434 French
438 Georgian
437 German
440 Greek
443 Hungarian
447 Icelandic
450 Italian
452 Latvian
453 Lithuanian
454 Macedonian
455 Maltese
456 Norwegian
459 Polish
461 Portuguese
464 Romanian
467 Russian
470 Serbo-Croatian
473 Slovak
476 Slovene
478 Spanish
481 Swedish
484 Turkish
487 Ukrainian

MIDDLE EAST
501 Arabic
401 Armenian
422 English
434 French
504 Farsi
507 Hebrew

PACIFIC REGION
422 English
601 Fijian
434 French
604 Kusaiean
607 Marshallese
610 Palauan
613 Ponapean
616 Samoan
619 Tahitian
622 Tongan
625 Trukese
628 Ulithian
631 Yapese

A-3

GRE Background Questions on Graduate Degree Objective, Parental Educational Attainment, Undergraduate and Graduate Field, and Previous Experience with GRE Tests: 1981-82

A. Have you previously taken one or more GRE tests?

(1) No
(2) Yes—took the test(s) on or prior to September 30, 1981
(3) Yes—took the test(s) more recently than September 30, 1981

If you are not registering for the Locater Service, and your answer to question A is (3), and your responses to the rest of the questions would be the same as they were before, you need not answer the questions again. If your responses to any of the rest of the questions would be different, please respond again to all of them.

J. What is your eventual graduate degree objective?

(1) Nondegree study
(2) Master's (M.A., M.S., M.Ed., etc.)
(3) Intermediate (such as Specialist)
(4) Doctorate (Ph.D., Ed.D., etc.)
(5) Postdoctorate study

I. Referring to the Major Field Code List on page 72, find your undergraduate major field of study. Blacken the spaces for that field's code number.

K. Referring to the Major Field Code List on page 72, find the field in which you plan to do your graduate work. Blacken the spaces for that field's code number. If you are undecided, use the following code:

00 Undecided

U. What was the highest level of education attained by your father?

(1) Did not graduate from high school
(2) High school graduate
(3) Beyond high school but did not graduate from a four-year college
(4) Graduate of a four-year college
(5) Beyond college but did not receive a graduate or professional degree
(6) Graduate or professional degree

V What was the highest level of education attained by your mother?

(1) Did not graduate from high school
(2) High school graduate
(3) Beyond high school but did not graduate from a four-year college
(4) Graduate of a four-year college
(5) Beyond college but did not receive a graduate or professional degree
(6) Graduate or professional degree

DEPARTMENT CODE LIST (for Item 13)—MAJOR FIELD CODE LIST (for Questions I and K)

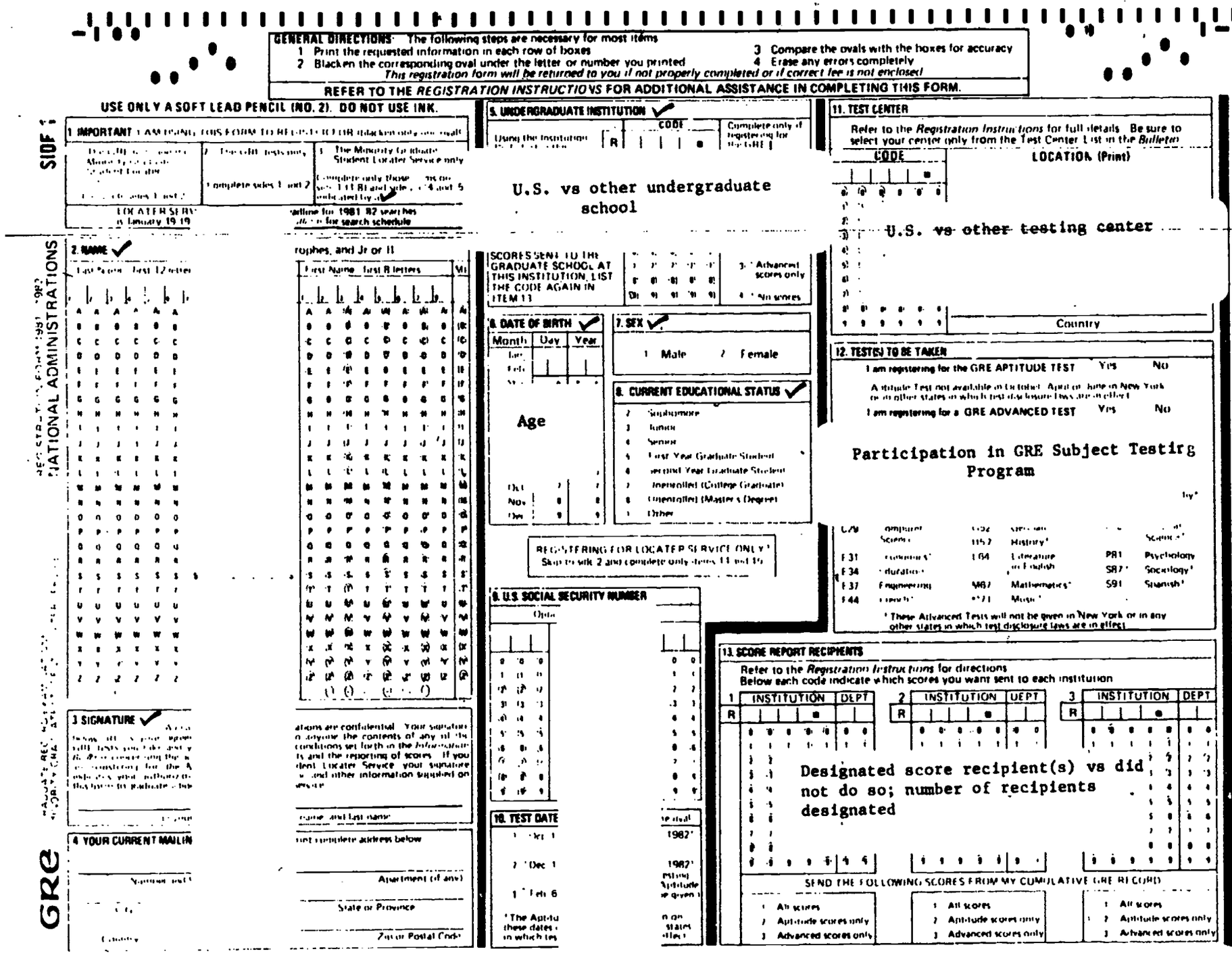
HUMANITIES
11 Archaeology
12 Architecture
26 Art History
13 Classical Languages
28 Comparative Literature
53 Dramatic Arts
14 English
29 Far Eastern Languages and Literature
15 Fine Arts, Art, Design
16 French
17 German
58 Italian
04 Linguistics
18 Music
57 Near Eastern Languages and Literature
20 Philosophy
21 Religious Studies or Religion
22 Russian
23 Spanish
24 Speech
10 Other Foreign Languages
99 Other Humanities

SOCIAL SCIENCES
27 American Studies
01 Anthropology
02 Business and Commerce
03 Communications
04 Economics
05 Education (including M.A. in Teaching)
01 Educational Administration
08 Educational Psychology
70 Geography
92 Government
06 Guidance and Counseling
05 History
07 Industrial Relations and Personnel
09 International Relations
10 Journalism
09 Law
90 Library Science
91 Physical Education
92 Political Science
03 Psychology
94 Public Administration
95 Slavic Studies
79 Social Psychology
96 Social Work
05 Sociology
97 Urban Development (Regional Planning)
00 Other Social Sciences

BIOLOGICAL SCIENCES
31 Agriculture
32 Anatomy
03 Audiology
33 Bacteriology
34 Biochemistry
35 Biology
36 Biophysics
37 Botany
38 Dentistry
39 Entomology
40 Forestry
08 Genetics
41 Home Economics
25 Hospital and Health Service Administration
42 Medicine
07 Microbiology
43 Nursing
77 Nutrition
44 Occupational Therapy
45 Optometry
46 Osteopathy
08 Parasitology
06 Pathology
83 Pharmacology
47 Pharmacy
48 Physical Therapy
49 Physiology
50 Public Health
51 Veterinary Medicine
52 Zoology
30 Other Biological Sciences

PHYSICAL SCIENCES
54 Applied Mathematics
01 Astronomy
02 Chemistry
78 Computer Sciences
03 Engineering, Aeronautical
04 Engineering, Chemical
05 Engineering, Civil
06 Engineering, Electrical
07 Engineering, Industrial
08 Engineering, Mechanical
09 Engineering, Other
71 Geology
72 Mathematics
73 Metallurgy
74 Mining
75 Oceanography
76 Physics
55 Statistics
00 Other Physical Sciences

02 ANY DEPARTMENT NOT LISTED



A.4. Registration form items yielding selected study data

A-5

Classifications of Disciplines within Broad Areas

Humanities:

Arts=Dramatic Arts	Other Humanities=Archaeology	Architecture
Music	Art History	Classical Lang.
Fine Arts, Art, Design	Comparative Lit.	English
	Far Eastern Lang.	French
	German	Italian
	Linguistics	Near Eastern Lang.
	Philosophy	Religion
	Russian	Spanish
	Speech	Other Foreign Lang.
	Other Humanities	

Social Sciences:

Education=Education	Other Social Sciences=Business and Commerce	
Educational Admin.	Communications	
Educational Psych.	Industrial Relations	
Guidance and Counseling	Journalism	
Physical Education	Law	
	Library Science	
	Public Administration	
	Social Work	
Behavioral Sciences=American Studies	Anthropology	
Economics	Geography	
History	International Rel.	
Psychology	Slavic Studies	
Social Psychology	Sociology	
Urban Development	Other Social Sciences	
Political Science and Government		

Biological Sciences:

Biosciences=Biochemistry	Health=Anatomy	
Biology	Audiology	Optometry
Biophysics	Bacteriology	Osteopathy
Botany	Dentistry	Parasitology
Genetics	Health Admin.	Pathology
Microbiology	Medicine	Pharmacology
Physiology	Nursing	Pharmacy
Zoology	Nutrition	Physical Therapy
Other Biological Sci.	Occupational Therapy	Public Health

Other Applied Biological Sciences=Agriculture
Entomology
Forestry
Home Economics
Veterinary Medicine

Physical Sciences:

Engineering=Aeronautical Eng.	Math. Science=Applied Mathematics	
Chemical Eng.	Computer Sciences	
Civil Eng.	Mathematics	
Electrical Eng.	Statistics	
Industrial Eng.		
Mechanical Eng.	Physical Science=Astronomy	
Other Eng.	Chemistry	
Metallurgy	Physics	
Mining	Geology	
	Oceanography	
	Other Physical Sciences	

Appendix B

Tabular Summmaries of, Data for Foreign Nationals and a 10 Percent Sample of U.S. Citizens Taking the GRE General (Aptitude) Test During 1981-82

List of Tables

TABLE 1. DISTRIBUTION BY COUNTRY AND REGION OF NON-U. S. CITIZENS TAKING THE GRE GENERAL TEST, 1981-82, ACCORDING TO REPORTED U. S. RESIDENCY STATUS: LEADING 25 COUNTRIES PLUS REGIONAL AND NON-U. S. TOTALS

COUNTRY OF CITIZENSHIP AND REGION	NUMBER OF EXAMINEES N	RESIDENT ALIEN			OTHER NON-U. S.		
		NO.	PER CENT BY COUNTRY	PER CENT OF NON-U. S. TOTAL#	NO.	PER CENT BY COUNTRY	PER CENT OF NON-U. S. TOTAL#
AFRICA-TOTAL###	(2173)	601	27.66	2.27	1572	72.34	5.94
NIGERIA	(883)	298	33.75	1.13	585	66.25	2.21
AMERICA-TOTAL##	(4297)	1144	26.62	4.32	3153	73.38	11.92
MEXICO	(631)	124	19.65	0.47	507	80.35	1.92
CANADA	(1470)	326	22.18	1.23	1144	77.82	4.32
BRAZIL	(294)	51	17.35	0.19	243	82.65	0.92
COLOMBIA	(236)	69	29.24	0.26	167	70.76	0.63
VENEZUELA	(396)	60	15.15	0.23	336	84.85	1.27
ASIA-TOTAL##	(14443)	1903	13.18	7.19	12540	86.82	47.40
TAIWAN	(3791)	316	8.34	1.19	3475	91.66	13.14
HONG KONG	(674)	163	24.18	0.62	511	75.82	1.93
INDIA	(4210)	382	9.07	1.44	3828	90.93	14.47
INDONESIA	(275)	51	18.55	0.19	224	81.45	0.85
JAPAN	(894)	139	15.55	0.53	755	84.45	2.85
KOREA	(1547)	310	20.04	1.17	1237	79.96	4.68
MALAYSIA	(628)	67	10.67	0.25	561	89.33	2.12
PAKISTAN	(266)	46	17.29	0.17	220	82.71	0.83
PHILIPPINES	(467)	90	19.27	0.34	377	80.73	1.43
THAILAND	(778)	88	11.31	0.33	690	88.69	2.61
EUROPE-TOTAL##	(2920)	698	23.90	2.64	2222	76.10	8.40
TURKEY	(248)	35	14.11	0.13	213	85.89	0.81
GREAT BRITAIN	(599)	198	33.06	0.75	401	66.94	1.52
FRANCE	(297)	43	14.48	0.16	254	85.52	0.96
FED. RP. GERMANY	(267)	81	30.34	0.31	186	69.66	0.70
GREECE	(424)	81	19.10	0.31	343	80.90	1.30
MIDEAST-TOTAL##	(2316)	711	30.70	2.69	1605	69.30	6.07
IRAN	(1119)	372	33.24	1.41	747	66.76	2.82
LEBANON	(332)	105	31.63	0.40	227	68.37	0.86
SAUDI ARABIA	(222)	73	32.88	0.28	149	67.12	0.56
PACIFIC-TOTAL##	(306)	74	24.18	0.28	232	75.82	0.88
AUSTRALIA	(210)	45	21.43	0.17	165	78.57	0.62
ALL NON-U. S. TOTAL##	(26455)	5131	19.40	19.40	21324	80.60	80.60

#BASE FOR PERCENTAGES IS THE TOTAL NUMBER OF NON-U. S. CITIZENS, ALL COUNTRIES (N = 26,455).
##REGIONAL AND NON-U. S. TOTALS INCLUDE EXAMINEES FROM ALL COUNTRIES, NOT JUST THE LEADING COUNTRIES; THUS SUM OF DETAIL FOR LEADING COUNTRIES IS LESS THAN THE REPORTED TOTALS. THIS PATTERN IS FOLLOWED IN PRESENTING DATA IN SUBSEQUENT TABLES UNLESS OTHERWISE NOTED.

TABLE 2. SEX, AGE, FAMILY EDUCATION, AND LANGUAGE BACKGROUND: U.S. CITIZENS VS. NON-U.S. CITIZENS, 1981-82

VARIABLE	U.S. CITIZENS		NON-U.S. CITIZENS	
	NO. OF EXAMINEES	%	NO. OF EXAMINEES	%
SEX				
*MALE	6619	43	19020	73
FEMALE	8850	57	7212	27
TOTAL	15469	100	26232	100
AGE				
BELOW 23	5185	33	5449	21
*23-26	4860	31	10726	41
*27-30	2245	15	5677	22
31+	3191	21	4211	16
TOTAL	15481	100	26063	100
FATHER'S EDUCATION				
*4-YR. COLLEGE OR MORE	6537	43	10817	44
LESS THAN 4-YR. COLLEGE	8522	57	13542	56
TOTAL	15059	100	24359	100
MOTHER'S EDUCATION				
MORE THAN HIGH SCHOOL	8457	56	8055	33
*HIGH SCHOOL OR LESS	6611	44	16187	67
TOTAL	15068	100	24242	100
BEST LANGUAGE				
ENGLISH	15012	98	9553	37
*OTHER	312	2	16300	63
TOTAL	15324	100	25853	100

"*" INDICATES THAT THE PERCENT OF EXAMINEES IN THIS SUBGROUP IS HIGHER AMONG NON-U. S, CITIZENS THAN AMONG U. S. CITIZENS.

TABLE 3. CURRENT EDUCATIONAL STATUS, DEGREE GOAL, INTENDED GRADUATE FIELD, LOCATION OF UNDERGRADUATE INSTITUTION, AND U.S. RESIDENCY STATUS: U.S. CITIZENS VS. NON-U.S. CITIZENS, 1981-82

VARIABLE	U.S. CITIZENS		NON-U.S. CITIZENS	
	NO. OF EXAMINEES	%	NO. OF EXAMINEES	%
DEGREE GOAL				
*PH.D.	5666	37	11146	45
M.A./M.S.	9447	63	13802	55
TOTAL	15113	100	24948	100
INTENDED GRADUATE FIELD				
ARTS AND HUMANITIES	1781	14	1745	8
SOCIAL SCIENCES	6497	49	6061	27
BIOSCIENCES	2876	22	3222	14
*MATHEMATICS AND PHYSICAL SCIENCES	2007	15	11742	52
TOTAL	13161	100	22770	100
UNDERGRADUATE SCHOOL				
U.S. INSTITUTION	14951	96	7271	28
*NON-U.S. INSTITUTION	687	4	19134	72
TOTAL	15638	100	26405	100
EDUCATIONAL STATUS				
ENROLLED UNDERGRADUATE	6966	45	7169	29
NON-ENROLLED B.A./B.S.	4166	27	5600	23
*ENROLLED GRADUATE	2366	15	4598	19
*NON-ENROLLED M.A./M.S.	1200	8	3863	16
*OTHER STATUS	706	5	3537	14
TOTAL	15484	100	24767	100
RESIDENCY STATUS				
RESIDENT ALIEN	NOT APPLICABLE		5131	19
OTHER STATUS			21324	81
TOTAL			26455	100

"*" INDICATES THAT THE PERCENT OF EXAMINEES IN THIS SUBGROUP IS HIGHER AMONG NON-U. S. CITIZENS THAN AMONG U. S. CITIZENS.

TABLE 4. TEST TAKING AND SCORE REPORTING PATTERNS:
U.S. CITIZENS VS. NON-U.S. CITIZENS, 1981-82

VARIABLE	U.S. CITIZENS		NON-U.S. CITIZENS	
	NO. OF EXAMINEES	%	NO. OF EXAMINEES	%
TEST CENTER				
IN U.S.	15489	99	10899	41
*NOT IN U.S.	149	1	15449	59
TOTAL	15638	100	26348	100
EXPERIENCE WITH GRE				
FIRST TIME EXAMINEE	13650	87	22379	85
*REPEATER	1967	13	3937	15
TOTAL	15617	100	26316	100
SENT SCORE REPORT(S) TO DEPARTMENT				
YES	13603	87	14621	74 #
*NO	2034	13	5174	26
TOTAL	15637	100	19795	100
TOOK GRE SUBJECT TEST ##				
YES, ARTS AND HUMANITIES	386	22	317	21
*YES, SOCIAL SCIENCES	1225	19	1346	25
*YES, BIOLOGICAL SCIENCES	553	20	691	26
YES, MATH. OR PHYSICAL SCIENCE	760	39	2763	36
YES, SOME FIELD	3307	21	5586	21

"*" INDICATES THAT THE PERCENTAGE OF EXAMINEES IN THIS SUBGROUP IS HIGHER AMONG NON-U. S. CITIZENS THAN AMONG U. S. CITIZENS.

#CODING FOR SCORE REPORTING VS. NON-REPORTING WAS MISSING FOR A SUBSTANTIAL NUMBER OF EXAMINEES FROM TWO COUNTRIES (INDIA AND TAIWAN), THUS ACCOUNTING FOR THE REDUCED N FOR THIS ITEM. DATA WERE ESSENTIALLY COMPLETE FOR ALL OTHER COUNTRY CONTINGENTS. SEE TABLE 7 FOR COMPARABLE PERCENTAGES, BY COUNTRY, FOR 25 LEADING COUNTRY CONTINGENTS, INCLUDING INDIA AND TAIWAN.

##EXCEPT FOR THE "YES, SOME FIELD" CATEGORY, THESE ARE PERCENTAGES OF EXAMINEES, BY CITIZENSHIP, AND INTENDED GRADUATE FIELD WHO TOOK A GRE SUBJECT (ADVANCED) TEST. APPROXIMATELY 21 PERCENT OF ALL U. S. CITIZENS AND 21 PERCENT OF ALL NON-U. S. CITIZENS TOOK A SUBJECT TEST.

TABLE 5. SELECTED PERSONAL AND BACKGROUND CHARACTERISTICS OF EXAMINEES BY COUNTRY OF CITIZENSHIP AND REGION: 1981-82

REGION AND COUNTRY	NO. OF EXAMINEES	SEX	AGE		FAMILY EDUCATION DATA		NATIVE (OR BEST) LANGUAGE		
		MALE	(IN YEARS) MEAN	(< 27)	FATHER 4-YR. COLL. GRAD	MOTHER BEYOND H. S.	ENGLISH IS BEST LANGUAGE	MOST PREVALENT LANGUAGE AND PER CENT OF CONTINGENT REPORTING IT#	
	N	%		%	%	%	%	LANGUAGE	%
AFRICA-TOTAL	(2173)	82+*	28.6+*	38	30	24	52+	#	
NIGERIA	(883)	85+*	29.0+*	34	29	27	66+	ENGLISH	64
AMERICA-TOTAL	(4297)	61 *	27.1+*	59	41	41+	46+	#	
MEXICO	(631)	77+*	26.4	63	44 *	36+	8	SPANISH	89
CANADA	(1470)	52 *	26.3	68	39	47+	93+	ENGLISH	92
BRAZIL	(294)	71 *	27.8+*	49	51+*	44+	7	PORTUGUESE	89
COLOMBIA	(236)	67 *	26.4	57	48+*	33	10	SPANISH	88
VENEZUELA	(396)	63 *	29.5+*	38	39	30	5	SPANISH	92
ASIA-TOTAL	(14443)	74+*	26.1	64	49+*	32	36	#	
TAIWAN	(3791)	70 *	26.1	63	39	23	15	CHINESE	89
HONG KONG	(674)	72 *	24.4	82	20	19	15	CHINESE	82
INDIA	(4210)	84+*	24.5	79	68+*	43+	71+	UNLISTED	46
INDONESIA	(275)	86+*	30.4+*	43	22	17	12	INDONESIAN	82
JAPAN	(894)	68 *	27.6+*	49	54+*	40+	5	JAPANESE	83
KOREA	(1547)	79+*	27.7+*	44	52+*	29	10	KOREAN	87
MALAYSIA	(628)	71 *	27.3+*	53	12	10	52+	ENGLISH	50
PAKISTAN	(266)	86+*	27.5+*	54	58+*	30	40+	URDU	45
PHILIPPINES	(467)	38	26.6+*	62	68+*	71+*	70+	ENGLISH	69
THAILAND	(770)	59 *	26.7+*	61	36	31	14	THAI	83
EUROPE-TOTAL	(2920)	68 *	25.5	74	48+*	40+	30	#	
TURKEY	(248)	76+*	24.6	79	58+*	33	9	TURKISH	87
GREAT BRITAIN	(599)	62 *	25.6	72	47+*	43+	94+	ENGLISH	92
FRANCE	(297)	68 *	24.6	82	56+*	47+	5	FRENCH	91
FED. RP. GERMANY	(267)	59 *	26.3	72	50+*	45+	14	GERMAN	84
GREECE	(424)	78+*	24.3	87	39	26	6	GREEK	93
MIDEAST-TOTAL	(2316)	80+*	26.4	63	33	24	16	#	
IRAN	(1119)	77+*	25.3	71	40	26	17	FARSI	70
LEBANON	(332)	85+*	24.1	83	26	25	19	ARABIC	71
SAUDI ARABIA	(222)	96+*	29.4+*	36	20	12	12	ARABIC	85
PACIFIC-TOTAL	(306)	63 *	27.8+*	59	37	37+	91+	#	
AUSTRALIA	(210)	59 *	28.6+*	56	39	34+	95+	ENGLISH	95
ALL NON-U. S.	(26455)	73 *	26.4	62	44 *	33	37	#	
U. S. CITIZENS	(15638)	43	26.7	65	43	56	98	ENGLISH	96

NOTE: "+" INDICATES HIGHER THAN "ALL NON-U.S."; "*" INDICATES HIGHER THAN U. S. CITIZENS.
#NOT DETERMINED FOR THE REGIONAL AND ALL NON-U. S. CITIZENS.

TABLE 6. CURRENT EDUCATIONAL STATUS, DEGREE GOAL, INTENDED FIELD, U. S. RESIDENCY STATUS, AND U. S. UNDERGRADUATE ATTENDANCE, BY COUNTRY OF CITIZENSHIP AND REGION: 1981-82

REGION AND COUNTRY	NO. OF EXAMINEES	CURRENT EDUCATIONAL STATUS				GOAL	INTENDED GRADUATE FIELD				RESIDENCY STATUS	UNDERGRADUATE SCHOOL
		ENR. U.G.	NON-ENR. U.G.	ENR. GRAD	NON-ENR. MA/MS	PH.D.	ARTS + HUM.	SOC. SCI.	BIO. SCI.	PHYS. SCI.	RESIDENT ALIEN	U.S.
		%	%	%	%	%	%	%	%	%	%	%
AFRICA-TOTAL	(2173)	27	22	23+*	18+*	43 *	6	36+	24+*	34 *	28+	48+
NIGERIA	(883)	35+	20	24+*	14 *	42 *	7	41+	24+*	28 *	34+	66+
AMERICA-TOTAL	(4297)	34+	22	18 *	17+*	40 *	10+	41+	20+	29 *	27+	33+
MEXICO	(631)	20	24+	21+*	26+*	33	5	35+	19+	41 *	20+	23
CANADA	(1470)	49+*	21	13	9 *	54+*	15+*	51+*	20+	15	22+	23
BRAZIL	(294)	16	18	23+*	30+*	44 *	9+	20+	10	52 *	17	20
COLOMBIA	(236)	25	28+*	18	25+*	30	5	36+	19+	40 *	29+	33+
VENEZUELA	(56)	18	15	25+*	34+*	18	5	31+	23+	41 *	15	34+
ASIA-TOTAL	(14443)	25	25+	17 *	16 *	47+*	6	20	12	62+*	13	17
TAIWAN	(3791)	22	39+*	17 *	12 *	44 *	6	14	11	70+*	8	8
HONG KONG	(674)	62+*	18	11	4	38 *	10+	21	7	62+*	24+	60+
INDIA	(4210)	23	18	13	16 *	49+*	3	9	12	76+*	9	8
INDONESIA	(275)	28	18	24+	20+*	24	6	29+	12	53+*	19	39+
JAPAN	(894)	24	28+*	18 *	13 *	32	20+*	39+	8	33 *	16	24
KOREA	(1547)	16	26+	27+*	21+*	77+*	9+	30+	11	50 *	20+	11
MALAYSIA	(628)	40+	14	7	20+*	34	4	36+	10+	42 *	11	36+
PAKISTAN	(266)	28	16	15	24+*	39 *	2	19	11	67+*	17	31+
PHILIPPINES	(467)	14	40+*	21+*	17+*	36	8	30+	21+	34 *	19	17
THAILAND	(778)	17	11	20+*	31+*	32	6	40+	15+	39 *	11	17
EUROPE-TOTAL	(2920)	34+	18	18 *	12 *	46+	13+	30+	12	45 *	24+	30+
TURKEY	(248)	46+*	12	18 *	12 *	44 *	5	16	6	74+*	14	18
GREAT BRITAIN	(599)	36+	29+*	11	12 *	49+	17+*	37+	15+	31 *	33+	31+
FRANCE	(297)	19	9	21+*	17+*	24	15+*	19	10	56+*	14	20
FED. RP. GERMANY	(267)	23	13	25+*	9 *	56+*	23+*	34+	11	32 *	30+	50+
GREECE	(424)	53+*	12	16 *	10 *	50+*	5	22	8	65+*	19	31+
MIDEAST TOTAL	(2316)	41	13	26+*	12 *	39 *	5	23	13	59+*	31+	62+
IRAN	(1119)	50+*	11	25+*	9 *	40 *	5	19	10	66+*	33+	80+
LEBANON	(332)	56+*	12	19 *	7	24	3	16	7	73+*	32+	67+
SAUDI ARABIA	(222)	21	14	43+*	15 *	38	6	36+	15+	43 *	33+	36+
PACIFIC TOTAL	(306)	23	22	21+*	16 *	56+*	13+	40+	19+	28 *	24+	25
AUSTRALIA	(210)	21	23	21+*	15 *	57+*	14+	39+	20+	27 *	21+	23
ALL NON-U. S.	(26455)	29	23	19 *	16 *	45 *	8	27	14	52 *	19	28
U. S. CITIZENS	(15630)	45	27	15	8	37	14	49	22	15	NOT APPLICABLE	96

NOTE: "+" INDICATES HIGHER THAN "ALL NON-U. S."; "*" INDICATES HIGHER THAN U. S. CITIZENS.

TABLE 7. TEST-TAKING PATTERNS OF EXAMINEES BY COUNTRY OF CITIZENSHIP AND REGION: 1981-82

REGION AND COUNTRY	NO. OF EXAMINEES	TESTED IN U.S. CENTER %	FIRST-TIME EXAMINEE %	TOOK GRE SUBJECT TEST#& %	SCORE REPORTING PATTERN REPORTED SCORES %	SCORE REPORTING PATTERN NO. DEPARTMENTS DESIGNATED MEAN	S. D.
AFRICA-TOTAL	(2173)	66+	82	17	79	2.1 *	0.9
NIGERIA	(883)	80+	79	14	81+	2.3 *	0.9
AMERICA-TOTAL	(4297)	52+	87+	32	83+	2.1 *	0.9
MEXICO	(631)	57+	84	22	77+	2.1 *	0.9
CANADA	(1470)	31	91+	44+*	86+	2.1 *	0.9
BRAZIL	(294)	36	89+*	30+*	81+	2.2 *	0.9
COLOMBIA	(236)	67+	85	40+*	85+	2.0	0.9
VENEZUELA	(396)	80+	82	17	70	1.9	0.9
ASIA-TOTAL	(14443)	28	85	27 *	67	2.3+*	0.9
TAIWAN	(3791)	20	84	11	63 #	2.2 *	0.9
HONG KONG	(674)	62+	86+	36+*	67	2.4 +*	0.9
INDIA	(4210)	14	89+*	51+*	78+#	2.2 *	0.9
INDONESIA	(275)	58+	80	26 *	64	2.0	0.9
JAPAN	(894)	37	77	38+*	67	2.2 *	0.9
KOREA	(1547)	30	79	20	55	2.5+*	0.8
MALAYSIA	(628)	38	90+*	21	72	2.5+*	0.8
PAKISTAN	(266)	54+	82	19	71	2.3+*	0.9
PHILIPPINES	(467)	31	92+*	25 *	81+	2.2 *	0.9
THAILAND	(778)	42+	77	15	63	2.2 *	0.9
EUROPE-TOTAL	(2920)	41	91+*	41+*	80+	2.2 *	0.9
TURKEY	(248)	46+	79	42+*	69	2.5+*	0.8
GREAT BRITAIN	(599)	44+	92+*	34+*	85+	2.1	0.9
FRANCE	(297)	26	94+*	47+*	78+	2.3 *	0.9
FED. RP. GERMANY	(267)	51+	94+*	39+*	78+	1.9	0.9
GREECE	(424)	38	86+	46+*	68	2.5+*	0.8
MIDEAST-TOTAL	(2316)	81+	77	20	65	2.1 *	0.9
IRAN	(1119)	96+	75	20	69	2.0	0.9
LEBANON	(332)	75+	83	19	70	2.2 *	0.9
SAUDI ARABIA	(222)	78+	69	17	46	2.1 *	0.9
PACIFIC-TOTAL	(306)	38	93+*	25 *	85+	2.1 *	0.9
AUSTRALIA	(210)	32	97+*	26 *	87+	2.1 *	0.9
ALL NON-U. S.	(26455)	41	85	28 *	74	2.2 *	0.9
U. S. CITIZENS	(15638)	99	87	22	87	2.0	0.9

NOTE: "+" INDICATES HIGHER THAN "ALL NON-U. S."; "*" INDICATES HIGHER THAN "U. S. CITIZENS".
#PERCENTAGES BASED ON SUBSTANTIALLY REDUCED N. SEE NOTE FROM TABLE 4.
&PERCENTAGES BASED ON THOSE RESPONDING "YES, SOME FIELD" + "NO, SOME FIELD", INSTEAD OF "ALL TEST TAKERS" AS IN TABLE 4.

TABLE 8. GENERAL TEST SCORE DATA BY SEX, AGE, FAMILY EDUCATION AND ENGLISH BACKGROUND FOR U.S. CITIZENS AND NON-U.S. CITIZENS, 1981-82

SUBGROUPING VARIABLE	U.S. CITIZENS						NON-U.S. CITIZENS					
		GRE-V		GRE-Q		GRE-A		GRE-V		GRE-Q		GRE-A	
	N	MEAN	S.D.	MEAN	S.D.	MEAN	S.D.	N	MEAN	S.D.	MEAN	S.D.	MEAN	S.D.
SEX														
MALE	(6619)	505	113	564	130	528	125	(19020)	371	116	610	131	443	116
FEMALE	(8850)	493	116	489	124	515	123	(7212)	387	126	537	136	446	114
TOTAL	(15469)	498	115	521	132	520	124	(26232)	375	119	590	136	443	116
AGE														
BELOW 23	(5185)	499	109	555	128	557	122	(5449)	427	130	634	121	507	116
23-26	(4860)	487	112	522	128	520	119	(10726)	369	113	601	126	449	109
27-30	(2245)	504	117	509	129	508	118	(5677)	350	106	576	140	416	105
31+	(3191)	509	125	476	130	472	118	(4211)	361	119	524	146	386	102
TOTAL	(15481)	498	115	522	132	521	124	(26063)	376	119	590	136	444	115
FATHER'S EDUCATION														
4-YR. COLLEGE OR MORE	(6537)	523	111	553	124	551	120	(10817)	396	126	604	131	462	118
LESS THAN 4-YR. COLLEGE	(8522)	479	114	498	132	498	121	(13542)	360	111	577	139	429	111
TOTAL	(15059)	498	115	522	131	521	124	(24359)	376	119	589	136	443	115
MOTHER'S EDUCATION														
MORE THAN HIGH SCHOOL	(8457)	515	113	538	127	540	122	(8055)	411	131	596	133	472	120
HIGH SCHOOL OR LESS	(4611)	476	113	501	134	497	122	(16187)	358	109	585	138	429	110
TOTAL	(15068)	498	115	522	131	521	124	(24242)	376	119	589	136	443	115
BEST LANGUAGE														
ENGLISH	(15012)	500	114	523	131	523	123	(9553)	436	136	570	139	462	127
OTHER	(312)	406	122	469	143	429	114	(16300)	340	92	600	133	433	107
TOTAL	(15324)	498	115	522	132	521	124	(25853)	376	120	589	136	444	116

NOTE: UNDERSCORING INDICATES A SUBGROUP VALUE HIGHER THAN THAT FOR THE TOTAL GROUP.

TABLE 9. GRE GENERAL TEST SCORE DATA BY CURRENT EDUCATIONAL STATUS, DEGREE GOAL INTENDED GRADUATE FIELD, LOCATION OF UNDERGRADUATE SCHOOL, AND RESIDENCY STATUS, FOR U.S. CITIZENS AND NON-U.S. CITIZENS: 1981-82

SUBGROUPING VARIABLE	U.S. CITIZENS						NON-U.S. CITIZENS					
		GRE-V		GRE-Q		GRE-A		GRE-V		GRE-Q		GRE-A	
	N	MEAN	S.D.	MEAN	S.D.	MEAN	S.D.	N	MEAN	S.D.	MEAN	S.D.	
EDUCATIONAL STATUS													
ENROLLED UNDERGRADUATE	(6966)	497	112	543	132	542	124	(7169)	394	127	598	137	474	121
NON-ENROLLED B.A./B.S.	(4166)	514	113	527	124	526	117	(5600)	370	118	602	130	443	110
ENROLLED GRADUATE	(2366)	462	115	471	130	473	119	(4593)	360	114	569	144	424	115
NON-ENROLLED M.A./M.S.	(1200)	515	121	496	128	493	119	(3063)	358	108	566	141	413	106
OTHER STATUS	(786)	508	120	499	133	492	120	(3537)	385	118	595	129	440	113
TOTAL	(15484)	498	115	522	132	521	124	(24767)	376	119	588	137	443	116
DEGREE GOAL														
PH.D.	(5666)	530	113	549	128	543	124	(11146)	399	124	609	133	460	118
M.A./M.S.	(9447)	479	111	504	131	507	121	(13302)	359	112	571	137	430	112
TOTAL	(15113)	493	114	521	132	520	123	(24943)	377	119	588	137	444	116
INTENDED GRADUATE FIELD														
ARTS AND HUMANITIES	(1781)	527	119	509	124	528	122	(1745)	404	137	520	135	440	116
SOCIAL SCIENCES	(6497)	485	117	483	124	496	120	(6061)	391	124	517	142	428	117
BIOSCIENCES	(2076)	498	105	533	116	530	118	(3222)	382	116	543	131	428	118
MATHEMATICS/ PHYS. SCIENCES	(2007)	520	109	645	104	582	120	(11742)	364	113	652	102	458	112
TOTAL	(13161)	498	115	522	132	521	124	(22770)	377	119	590	136	444	116
UNDERGRADUATE SCHOOL														
U.S. INSTITUTION	(14951)	500	114	523	131	523	123	(7271)	363	110	532	140	423	114
NON-U.S. INSTITUTION	(687)	462	121	474	136	470	121	(19134)	380	122	611	129	451	115
TOTAL	(15638)	498	115	521	132	520	124	(26405)	375	119	589	137	443	116
RESIDENCY STATUS														
RESIDENT ALIEN	(0)							(5131)	370	117	530	142	420	115
OTHER NON-U.S.	(0)			NOT APPLICABLE				(21324)	376	120	603	131	449	115
TOTAL	(0)							(26455)	375	119	589	136	443	116

NOTE: UNDERSCORING INDICATES A SUBGROUP VALUE HIGHER THAN THAT FOR THE TOTAL GROUP.

TABLE 10. GRE GENERAL TEST SCORE DATA BY SELECTED TEST TAKING PATTERNS FOR U.S. CITIZENS AND NON-U.S. CITIZENS: 1981-82

SUBGROUPING VARIABLE	U.S. CITIZENS						NON-U.S. CITIZENS					
		GRE-V		GRE-Q		GRE-A		GRE-V		GRE-Q		GRE-A	
	N	MEAN	S.D.	MEAN	S.D.	MEAN	S.D.	N	MEAN	S.D.	MEAN	S.D.	MEAN	S.D.
TEST CENTER														
IN U.S.	(15489)	498	115	521	132	520	124	(10899)	355	109	536	141	415	112
NOT IN U.S.	(149)	547	115	539	116	527	116	(15449)	390	124	626	120	463	114
TOTAL	(15638)	498	115	521	132	520	124	(26348)	375	119	589	137	443	116
EXPERIENCE WITH GRE														
FIRST TIME EXAMINEE	(13650)	496	114	523	133	523	124	(22379)	379	121	590	137	447	116
REPEATER	(1967)	514	119	512	126	504	118	(3937)	356	104	587	135	423	110
TOTAL	(15617)	498	115	521	132	520	124	(26316)	375	119	589	136	443	116
SENT SCORE REPORT(S) TO DEPARTMENT(S)														
YES	(13603)	497	115	519	132	518	124	(14621)	386	121	563	139	442	120
NO	(2034)	506	115	535	130	534	122	(5174)	344	102	571	137	421	111
TOTAL	(15637)	498	115	521	132	520	124	(19795)#	375	118	565	138	436	118
TOOK GRE SUBJECT TESTS (BY INTENDED GRADUATE FIELD)														
YES, ARTS AND HUMANITIES	(386)	562	124	524	117	556	124	(317)	462	147	502	138	466	123
YES, SOCIAL SCIENCES	(1225)	501	116	502	126	514	121	(1346)	435	125	550	134	469	121
YES, BIOSCIENCES	(553)	524	107	583	110	563	125	(691)	416	121	552	121	462	128
YES, MATHEMATICS AND PHYSICAL SCI.	(760)	535	109	664	98	600	117	(2763)	394	116	661	100	482	121
NO (ALL FIELDS)	(11999)	491	114	509	129	511	121	(14130)	365	114	550	138	422	113
YES (ALL FIELDS)	(3307)	522	115	563	133	551	126	(5506)	407	124	606	130	474	123
TOTAL SAMPLE	(15638)	498	115	521	132	520	124	(26455)	375	119	589	136	443	116

NOTE: UNDERSCORING INDICATES A SUBGROUP VALUE HIGHER THAN THAT FOR THE TOTAL GROUP.
#REDUCED N DUE TO SUBSTANTIAL MISSING DATA ON SCORE-REPORTING FOR EXAMINEES FROM INDIA AND TAIWAN. SEE NOTE TO TABLE 4.
#"EXCEPT FOR THE "NO (ALL FIELDS)" AND "YES (ALL FIELDS)" CATEGORIES THESE ARE BASED ON THE GRADUATE FIELDS OF THESE SUBJECT TEST TAKERS.

TABLE 11. GRE GENERAL TEST SCORE DATA BY COUNTRY OF CITIZENSHIP AND REGION: 1981-82

REGION AND COUNTRY	NUMBER OF EXAMINEES N	VERBAL SECTION MEAN	VERBAL SECTION S. D.	QUANTITATIVE SECTION MEAN	QUANTITATIVE SECTION S. D.	ANALYTIC SECTION MEAN	ANALYTIC SECTION S. D.
AFRICA-TOTAL	(2173)	343	92	460	134	364	96
NIGERIA	(883)	336	76	419	124	342	77
AMERICA-TOTAL	(4297)	433+	123	527 *	138	459+	126
MEXICO	(631)	363	86	503	129	407	103
CANADA	(1470)	531+*	109	577 *	120	546+*	116
BRAZIL	(294)	385+	94	551 *	139	439	106
COLOMBIA	(236)	372	91	514	136	413	101
VENEZUELA	(396)	350	83	474	140	386	102
ASIA-TOTAL	(14443)	358	110	633+*	117	444+	107
TAIWAN	(3791)	302	62	686+*	81	454+	95
HONG KONG	(674)	362+	79	666+*	94	502+	102
INDIA	(4210)	431+	127	625+*	118	461+	115
INDONESIA	(275)	297	62	572 *	114	391	95
JAPAN	(894)	312	78	641+*	102	432	105
KOREA	(1547)	347	78	669+*	91	429	99
MALAYSIA	(628)	369	97	556 *	123	418	101
PAKISTAN	(266)	341	96	537 *	122	394	101
PHILIPPINES	(467)	431+	101	498	135	439	113
THAILAND	(778)	282	64	551 *	118	379	91
EUROPE-TOTAL	(2920)	437+	126	598+*	124	498+	116
TURKEY	(248)	332	84	618+*	106	453+	106
GREAT BRITAIN	(599)	550+*	123	594+*	112	553+*	117
FRANCE	(297)	423+	93	619+*	137	491+	113
FED. RP. GERMANY	(267)	439+	107	592+*	118	515+	113
GREECE	(424)	348	86	608+*	120	451+	100
MIDEAST-TOTAL	(2316)	304	79	537 *	128	399	103
IRAN	(1119)	302	74	547 *	122	400	100
LEBANON	(332)	323	72	570 *	112	432	102
SAUDI ARABIA	(222)	261	52	457	134	344	73
PACIFIC-TOTAL	(306)	544+*	143	594+*	131	532+*	132
AUSTRALIA	(210)	567+*	124	612+*	122	549+*	122
ALL NON-U. S.	(26455)	375	119	589 *	136	443	116
U. S. CITIZENS	(15638)	498	115	521	132	520	124

NOTE: "+" INDICATES HIGHER THAN "ALL NON-U. S."; "*" INDICATES HIGHER THAN "U. S. CITIZENS".

TABLE 12. GRE GENERAL TEST SCORE MEANS BY RESIDENCY STATUS, SEX, DEGREE GOAL, AND ATTENDANCE AT A U. S. UNDERGRADUATE SCHOOL BY COUNTRY OF CITIZENSHIP AND REGION: 1981-82

REGION AND COUNTRY	N	ALL EXAMINEES V	ALL EXAMINEES Q	ALL EXAMINEES A	MALES V	MALES Q	MALES A	PH. D. GOAL V	PH. D. GOAL Q	PH. D. GOAL A	U. S. UNDERGRADUATE V	U. S. UNDERGRADUATE Q	U. S. UNDERGRADUATE A	RESIDENT ALIEN V	RESIDENT ALIEN Q	RESIDENT ALIEN A
AFRICA-TOTAL	(2173)	343	460	364	341	471	361	364	479	376	333	424	348	330	422	344
NIGERIA	(883)	336	419	342	336	429	339	354	441	349	327	404	336	324	399	331
AMERICA-TOTAL	(4297)	433	527	459	427	560	458	474	556	492	420	480	437	422	475	431
MEXICO	(631)	363	503	407	366	524	411	391	516	422	360	443	388	357	451	380
CANADA	(1470)	531	577	546	534	618	552	553	601	565	507	538	519	512	541	513
BRAZIL	(294)	385	551	439	389	589	448	403	503	450	412	500	447	398	497	421
COLOMBIA	(236)	372	514	413	373	552	415	399	520	420	401	484	416	384	469	393
VENEZUELA	(396)	350	474	386	354	510	392	398	534	436	359	451	389	346	430	352
ASIA-TOTAL	(14443)	358	633	444	360	651	448	378	648	455	346	595	437	340	593	422
TAIWAN	(3791)	302	686	454	305	700	459	314	703	468	320	651	444	313	668	440
HONG KONG	(674)	362	666	502	359	684	508	381	683	514	362	666	502	372	654	495
INDIA	(4210)	431	625	461	427	640	463	449	623	466	374	547	413	370	541	405
INDONESIA	(275)	297	572	391	296	579	392	323	594	405	302	571	402	290	533	359
JAPAN	(894)	312	641	432	308	663	430	334	657	446	332	605	434	327	608	429
KOREA	(1547)	347	669	429	346	680	431	353	679	434	340	630	427	332	639	417
MALAYSIA	(628)	369	556	418	365	571	416	394	593	442	366	560	432	348	531	420
PAKISTAN	(266)	341	537	394	343	548	398	356	547	410	351	526	413	350	481	379
PHILIPPINES	(467)	431	498	439	436	549	454	464	525	457	399	465	426	386	442	404
THAILAND	(778)	282	551	379	284	575	302	305	556	394	289	533	397	279	539	383
EUROPE-TOTAL	(2920)	437	598	498	430	630	501	461	615	518	438	552	481	455	542	481
TURKEY	(248)	332	618	453	326	630	449	362	640	481	361	617	477	325	574	437
GREAT BRITAIN	(599)	550	594	553	548	623	555	567	616	566	510	565	526	527	567	529
FRANCE	(297)	428	619	491	426	661	497	455	591	484	445	534	463	474	521	469
FED. RP. GERMANY	(267)	439	592	515	425	642	534	459	606	528	457	569	511	473	543	512
GREECE	(424)	348	608	451	347	628	451	370	634	479	359	554	428	357	536	419
MIDEAST-TOTAL	(2316)	304	537	399	300	549	398	323	552	413	305	543	402	304	527	390
IRAN	(1119)	302	547	400	299	564	400	321	564	416	305	550	404	302	540	393
LEBANON	(332)	323	570	432	317	584	434	353	569	448	317	562	422	328	568	421
SAUDI ARABIA	(222)	261	457	344	260	460	343	266	483	353	264	460	342	253	412	324
PACIFIC-TOTAL	(306)	544	594	532	536	622	534	587	632	574	485	532	477	513	539	492
AUSTRALIA	(210)	567	612	549	566	654	563	606	647	592	494	545	492	542	551	517
ALL NON-U. S.	(26455)	375	589	443	371	610	443	399	609	460	363	532	423	370	530	420
U. S. CITIZENS	(15638)	498	521	520	505	564	528	530	549	543	500	523	523	NOT APPLICABLE		

NOTE: UNDERSCORING INDICATES A SUBGROUP VALUE HIGHER THAN THAT FOR "ALL EXAMINEES" FOR THE GIVEN REGION/COUNTRY.

TABLE 13. GRE GENERAL TEST SCORE MEANS BY FAMILY EDUCATION, AGE AND ENGLISH AS PRIMARY LANGUAGE BY COUNTRY OF CITIZENSHIP AND REGION: 1981-82

REGION AND COUNTRY		ALL EXAMINEES			FATHER GRADUATED 4-YEAR COLLEGE			MOTHER EDUCATED BEYOND HIGH SCHOOL			AGE IN YEARS LESS THAN 27			ENGLISH PRIMARY LANGUAGE		
	N	V	Q	A	V	Q	A	V	Q	A	V	Q	A	V	Q	A
AFRICA-TOTAL	(2173)	343	460	364	358	475	389	372	456	391	367	498	402	358	447	366
NIGERIA	(883)	336	419	342	345	409	351	343	403	347	348	435	366	336	417	341
AMERICA-TOTAL	(4297)	433	527	459	442	546	479	457	547	489	446	554	491	500	542	509
MEXICO	(631)	363	503	407	375	519	433	389	523	436	369	531	430	371	435	383
CANADA	(1470)	531	577	546	547	594	564	544	589	564	528	592	568	536	576	550
BRAZIL	(294)	385	551	439	389	569	457	387	563	463	395	587	466	486	541	498
COLOMBIA	(236)	372	514	413	302	516	432	306	528	431	381	537	433	442	468	439
VENEZUELA	(396)	350	474	386	358	476	393	360	488	407	371	524	431	426	450	428
ASIA-TOTAL	(14443)	358	633	444	384	635	458	393	633	467	373	646	465	413	609	451
TAIWAN	(3791)	302	686	454	304	680	457	307	680	464	301	691	468	299	668	436
HONG KONG	(674)	362	666	502	375	663	501	368	659	496	363	677	512	372	647	486
INDIA	(4210)	431	625	461	453	635	479	473	641	496	443	638	475	447	620	465
INDONESIA	(275)	297	572	391	310	579	421	296	598	416	306	624	432	316	589	407
JAPAN	(894)	312	641	432	320	640	445	320	646	445	321	634	445	386	604	446
KOREA	(1547)	347	669	429	346	670	437	348	663	441	361	678	450	353	655	408
MALAYSIA	(628)	369	556	418	382	551	439	421	569	462	379	595	454	400	568	431
PAKISTAN	(266)	341	537	394	353	539	403	373	553	443	340	553	410	369	510	393
PHILIPPINES	(467)	431	498	439	449	516	456	446	514	459	446	532	472	432	488	438
THAILAND	(778)	282	551	379	288	552	384	287	551	379	287	573	396	287	522	361
EUROPE-TOTAL	(2920)	437	598	498	440	607	508	453	601	514	431	613	508	527	580	535
TURKEY	(248)	332	618	453	350	627	476	359	612	467	333	633	461	314	564	412
GREAT BRITAIN	(599)	550	594	553	550	604	556	561	604	559	540	607	565	559	594	559
FRANCE	(297)	428	619	491	437	618	493	447	624	513	426	641	505	456	571	516
FED. RP. GERMANY	(267)	439	592	515	453	598	527	458	596	539	437	612	531	510	536	523
GREECE	(424)	348	608	451	356	630	470	363	609	468	348	615	458	359	523	422
MIDEAST-TOTAL	(2316)	304	537	399	324	553	422	335	563	434	313	561	420	318	520	399
IRAN	(1119)	302	547	400	320	557	417	322	558	421	313	564	419	310	520	390
LEBANON	(332)	323	570	432	346	550	452	351	560	458	323	577	438	318	538	422
SAUDI ARABIA	(222)	261	457	344	272	481	346	261	423	328	266	509	364	282	497	352
PACIFIC-TOTAL	(306)	544	594	532	576	622	569	571	620	558	550	625	568	566	601	547
AUSTRALIA	(210)	567	612	549	579	625	579	569	624	569	566	643	587	575	611	553
ALL NON-U. S.	(26455)	375	589	443	396	604	462	411	596	472	388	612	469	436	570	462
U. S. CITIZENS	(15638)	498	521	520	523	553	551	515	538	540	493	539	539	500	523	523

NOTE: UNDERSCORING INDICATES A VALUE HIGHER THAN THAT FOR "ALL EXAMINEES" FOR THE GIVEN REGION/COUNTRY.

TABLE 14. GRE GENERAL TEST SCORE MEANS BY EDUCATIONAL STATUS, BY COUNTRY OF CITIZENSHIP AND REGION: 1981-82

REGION AND COUNTRY	N	ALL EXAMINEES V	ALL EXAMINEES Q	ALL EXAMINEES A	ENROLLED U. G. V	ENROLLED U. G. Q	ENROLLED U. G. A	NON-ENROLLED U. G. V	NON-ENROLLED U. G. Q	NON-ENROLLED U. G. A	ENROLLED GRADUATE V	ENROLLED GRADUATE Q	ENROLLED GRADUATE A	NON-ENR. MASTER V	NON-ENR. MASTER Q	NON-ENR. MASTER A
AFRICA-TOTAL	(2173)	343	460	364	341	437	363	360	481	380	333	442	351	336	467	356
NIGERIA	(883)	336	419	342	320	408	338	350	465	363	332	389	329	347	424	339
AMERICA-TOTAL	(4297)	433	527	459	463	540	499	442	534	462	413	506	433	306	504	409
MEXICO	(631)	363	503	407	386	532	451	365	515	422	353	484	383	360	482	381
CANADA	(1470)	531	577	546	523	583	559	550	574	551	537	534	546	525	553	492
BRAZIL	(294)	385	551	439	399	542	466	417	552	445	303	550	436	370	551	436
COLOMBIA	(236)	372	514	413	414	509	445	367	521	401	380	507	411	324	515	403
VENEZUELA	(396)	350	474	386	384	467	411	368	500	405	342	453	300	324	403	368
ASIA-TOTAL	(14443)	358	633	444	382	660	485	340	644	441	348	625	432	345	607	417
TAIWAN	(3791)	302	686	454	305	695	485	300	685	450	298	675	441	314	699	455
HONG KONG	(674)	362	666	502	360	681	509	383	651	502	355	627	474	392	621	490
INDIA	(4210)	431	625	461	501	609	526	397	610	433	425	610	451	391	576	420
INDONESIA	(275)	297	572	391	316	632	443	287	583	386	284	536	357	302	547	382
JAPAN	(894)	312	641	432	318	615	442	311	648	427	319	633	422	304	663	433
KOREA	(1547)	347	669	429	356	662	447	340	675	429	354	666	431	342	677	418
MALAYSIA	(628)	369	556	418	367	501	444	387	577	433	372	530	403	353	519	377
PAKISTAN	(266)	341	537	394	369	502	456	371	535	415	310	504	351	341	536	369
PHILIPPINES	(467)	431	498	439	445	556	501	422	509	439	448	509	449	420	433	396
THAILAND	(778)	282	551	379	284	506	417	292	575	372	276	541	378	275	542	369
EUROPE-TOTAL	(2920)	437	598	493	436	602	509	462	580	501	433	590	490	428	584	473
TURKEY	(248)	332	618	453	340	648	473	327	589	431	334	608	463	288	586	407
GREAT BRITAIN	(599)	550	594	553	537	607	574	559	585	544	586	612	562	566	581	504
FRANCE	(297)	428	619	491	441	587	485	423	524	470	440	621	500	389	583	457
FED. RP. GERMANY	(267)	439	592	515	471	559	525	453	542	496	406	585	493	471	546	476
GREECE	(424)	348	608	451	357	619	465	332	588	435	334	568	426	345	605	431
MIDEAST-TOTAL	(2316)	304	537	399	318	562	424	300	543	393	291	512	380	292	509	375
IRAN	(1119)	302	547	400	314	558	418	301	564	396	285	535	382	281	517	372
LEBANON	(332)	323	570	432	322	574	437	315	570	416	321	551	413	323	512	401
SAUDI ARABIA	(222)	261	457	344	271	506	367	274	495	350	255	423	337	253	450	333
PACIFIC-TOTAL	(306)	544	594	532	502	586	539	601	608	553	521	591	522	547	568	484
AUSTRALIA	(210)	567	612	549	530	617	562	618	630	559	525	614	546	566	575	498
ALL NON-U. S.	(26455)	375	589	443	394	598	474	370	602	443	360	569	424	358	566	413
U. S. CITIZENS	(15638)	498	521	520	497	543	542	514	527	526	462	471	473	515	495	493

NOTE: UNDERSCORING INDICATES A SUBGROUP VALUE HIGHER THAN THAT FOR "ALL EXAMINEES" FOR THE GIVEN REGION/COUNTRY.

TABLE 15. GRE GENERAL TEST SCORE MEANS BY INTENDED GRADUATE FIELD, BY COUNTRY OF CITIZENSHIP AND REGION: 1981-82

REGION AND		ALL EXAMINEES			ARTS AND HUMANITIES			SOCIAL SCIENCE			BIOLOGICAL SCIENCE			MATHEMATICS AND PHYSICAL SCIENCE		
	N	V	Q	A	V	Q	A	V	Q	A	V	Q	A	V	Q	A
AFRICA-TOTAL	(2173)	343	460	364	343	402	349	344	392	349	346	449	356	343	555	392
NIGERIA	(883)	336	419	342	324	380	328	326	358	329	342	410	338	350	520	367
AMERICA-TOTAL	(4297)	433	527	459	467	472	463	445	488	454	432	508	454	410	618	472
MEXICO	(631)	363	503	407	370	393	373	364	450	387	364	473	403	363	576	428
CANADA	(1470)	531	577	546	550	545	538	526	546	529	533	590	558	542	708	593
BRAZIL	(294)	385	551	439	390	388	403	393	485	429	372	503	415	389	629	457
COLOMBIA	(236)	372	514	415	360	320	335	373	455	401	374	477	413	376	612	442
VENEZUELA	(396)	350	474	386	357	332	375	347	398	366	352	429	352	356	572	420
ASIA-TOTAL	(14443)	358	633	444	353	567	423	358	569	419	360	592	426	360	671	459
TAIWAN	(3791)	302	686	454	310	631	441	308	644	434	315	685	462	300	703	462
HONG KONG	(674)	362	666	502	393	598	483	375	626	484	398	656	505	351	700	510
INDIA	(4210)	431	625	461	453	488	424	465	521	440	408	538	422	429	656	469
INDONESIA	(275)	297	572	391	284	476	348	291	495	358	305	553	372	304	638	432
JAPAN	(894)	312	641	432	314	584	414	325	623	432	300	644	416	299	701	445
KOREA	(1547)	347	669	429	350	601	411	364	655	433	346	651	410	335	696	436
MALAYSIA	(628)	369	556	418	391	467	409	355	481	373	377	556	417	375	626	453
PAKISTAN	(266)	341	537	394	450	558	496	349	459	368	338	446	360	335	530	407
PHILIPPINES	(467)	431	498	439	434	437	410	436	447	426	423	462	416	440	605	487
THAILAND	(778)	282	551	379	296	490	368	280	484	355	296	500	395	281	624	404
EUROPE-TOTAL	(2920)	437	598	498	478	511	487	462	547	491	448	583	503	408	665	505
TURKEY	(248)	332	618	453	385	530	478	362	547	448	363	537	455	322	648	457
GREAT BRITAIN	(599)	550	594	553	616	569	572	570	558	549	523	579	545	506	660	549
FRANCE	(297)	428	619	491	423	478	437	439	523	455	463	620	507	426	691	514
FED. RP. GERMANY	(267)	439	592	515	457	492	480	447	571	512	478	618	532	407	675	540
GREECE	(424)	348	608	451	358	551	462	355	501	413	343	579	425	349	655	466
MIDEAST-TOTAL	(2316)	304	537	399	319	498	391	303	457	374	311	481	379	302	591	419
IRAN	(1119)	302	547	400	321	498	379	306	463	380	312	481	375	300	591	416
LEBANON	(332)	323	570	432	351	518	383	340	492	402	366	528	450	311	597	442
SAUDI ARABIA	(222)	261	457	344	264	468	361	251	384	326	266	411	320	268	542	365
PACIFIC-TOTAL	(306)	544	594	532	572	571	528	553	572	518	553	555	524	531	698	580
AUSTRALIA	(210)	567	612	549	595	589	551	562	589	522	582	568	539	557	714	604
ALL NON-U. S.	(26455)	375	589	443	404	520	440	391	517	428	382	543	428	364	652	458
U. S. CITIZENS	(15638)	498	521	520	527	509	528	485	483	496	498	533	530	528	645	582

NOTE: UNDERSCORING INDICATES A SUBGROUP VALUE HIGHER THAN THAT FOR "ALL EXAMINEES" FOR THE GIVEN REGION/COUNTRY.

TABLE 16. GRE GENERAL TEST SCORE MEANS FOR SELECTED TESTING-RELATED SUBGROUPS BY COUNTRY OF CITIZENSHIP AND REGION: 1981-82

REGION AND COUNTRY	N	ALL EXAMINEES V	Q	A	REPORT SCORES V	Q	A	NON-REPORTER V	Q	A	DOMESTIC (U.S.) CENTER V	Q	A	SUBJECT TEST V	Q	A
AFRICA-TOTAL	(2173)	343	460	364	345	462	365	344	463	367	330	435	347	361	504	391
NIGERIA	(883)	336	419	342	337	421	345	333	419	344	327	404	334	357	453	360
AMERICA-TOTAL	(4297)	433	527	459	438	530	463	436	529	463	400	480	421	462	566	498
MEXICO	(631)	363	503	407	365	505	408	364	500	410	349	474	384	335	528	429
CANADA	(1470)	531	577	546	531	577	546	532	579	549	510	543	517	539	600	569
BRAZIL	(294)	385	551	439	388	554	446	387	551	442	376	472	417	395	601	462
COLOMBIA	(236)	372	514	413	373	511	410	371	512	412	370	405	401	380	553	427
VENEZUELA	(396)	350	474	386	356	481	394	349	473	390	338	449	369	371	492	415
ASIA-TOTAL	(14443)	358	633	444	351	605	430	360	632	445	335	599	426	376	639	459
TAIWAN	(3791)	302	686	454	321	678	449#	299	684	453	310	667	441	345	707	504
HONG KONG	(674)	362	666	502	371	672	504	365	668	504	357	663	498	373	700	524
INDIA	(4210)	431	625	461	391	565	428#	432	624	462	379	554	416	425	608	453
INDONESIA	(275)	297	572	391	301	561	393	296	566	395	294	569	390	303	612	430
JAPAN	(894)	312	641	432	316	639	433	311	640	433	313	604	422	318	683	455
KOREA	(1547)	347	669	429	346	663	427	345	668	429	332	641	416	351	606	446
MALAYSIA	(628)	369	556	418	375	553	420	368	556	420	365	561	428	400	616	451
PAKISTAN	(266)	341	537	394	349	539	395	338	533	391	342	513	396	374	575	429
PHILIPPINES	(467)	431	498	439	433	498	439	433	502	444	403	468	426	451	538	464
THAILAND	(778)	282	551	379	286	546	376	279	548	379	275	535	373	299	576	410
EUROPE-TOTAL	(2920)	437	598	498	447	598	504	440	600	501	437	556	479	437	629	511
TURKEY	(248)	332	618	453	337	619	463	334	617	459	329	601	444	344	631	468
GREAT BRITAIN	(599)	550	594	553	559	593	559	553	594	556	524	565	528	564	618	564
FRANCE	(297)	428	619	491	433	617	490	428	624	493	447	534	463	435	652	507
FED. RP. GERMANY	(267)	439	592	515	451	588	517	436	592	516	468	556	511	433	618	519
GREECE	(424)	348	608	451	357	609	458	348	609	451	351	557	429	353	651	468
MIDEAST-TOTAL	(2316)	304	537	399	312	549	409	307	539	405	300	532	394	321	571	427
IRAN	(1119)	302	547	400	308	551	405	303	546	405	301	545	397	323	577	437
LEBANON	(332)	323	570	432	332	579	445	325	575	436	317	564	421	332	586	439
SAUDI ARABIA	(228)	261	457	344	266	471	344	258	457	343	260	441	341	261	470	343
PACIFIC-TOTAL	(306)	544	594	532	555	600	535	549	593	537	474	534	476	580	670	600
AUSTRALIA	(210)	567	612	549	573	614	545	569	614	551	509	556	508	589	680	609
ALL NON-U. S.	(26455)	375	589	443	386	563	442	379	590	447	355	536	415	407	606	474
U. S. CITIZENS	(15638)	498	521	520	497	519	518	496	523	523	498	521	520	522	563	551

NOTE: UNDERSCORING INDICATES A SUBGROUP VALUE HIGHER THAN THAT FOR "ALL EXAMINEES" FOR A GIVEN REGION/COUNTRY.
#CODING FOR SCORE REPORTING MISSING FOR A SUBSTANTIAL MAJORITY OF EXAMINEES (SEE NOTE, TABLE 4).